

PUBLIC HEALTH

LONDON: THE SOCIETY OF MEDICAL OFFICERS OF HEALTH
Tavistock House South, Tavistock Square, W.C.1



No. 9.-Vol. LXV.

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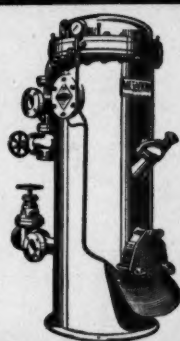
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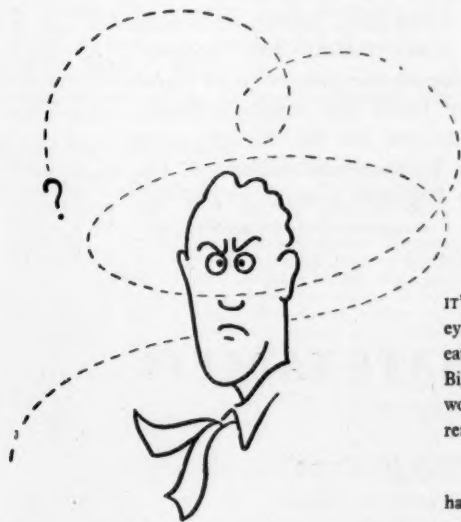
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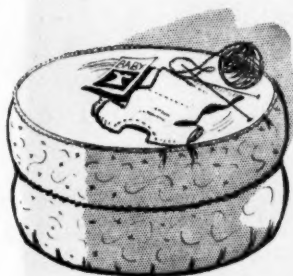
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No. 9, Vol. LXV

JUNE, 1952

CONTENTS

EDITORIAL	PAGE
The President-Elect	141
The New Minister of Health	141
Comprehensive Dental Service for the Priority Classes and School Children	141
SPECIAL ARTICLES	
The Case for Fluoridation. By G. Wynne-Griffith, M.D., D.F.H.	142
Orthodontics in the School Dental Clinic. By H. D. Freeman, L.D.S., R.C.S. (ENG.)	145
NEWS AND REPORTS	
Co-operation Between Public Health Service, General Practitioners and Hospitals	100
BOOK REVIEWS	
The Educability of Cerebral Palsied Children (M. I. Dunsdon); Causes and Prevention of Tuberculosis (B. R. Clarke); The Rhesus Danger (R. N. C. McCurdy)	151

OBITUARY	PAGE
J. Howard-Jones, T.D., M.D., C.M., D.Sc.	182
SOCIETY OF MEDICAL OFFICERS OF HEALTH	
<i>Notices</i>	
Maternity and Child Welfare Group	183
School Health Service Group	182
<i>Reports</i>	
Ordinary Meeting	182
Council Meeting	188
General Purposes Committee	155
Recruitment, Training and Qualifications of Sanitary Inspectors (Memorandum of Evidence)	187
Decentralisation of National Health Service Part III Functions	181
Northern Branch	161
Welsh Branch	169
Official Notices	183

EDITORIAL

The President-Elect

No man has done more to proclaim the virtues and achievements of preventive medicine than Dr Andrew Topping and it is a matter for congratulation to the Society that it has picked him to be its President in the forthcoming session 1952-53. Another reason for pleasure at his election is that, as Dean of the London School of Hygiene and Tropical Medicine, he is in contact with the main source of supply for recruits to the British Public Health Service.

Dr. Topping will be installed by his predecessor, Dr. W. G. Clark, on Thursday, September 18th, and will deliver his Presidential Address at a meeting to be held probably at the London School of Hygiene.

The Annual Dinner will be held this year on Thursday, October 23rd, and we hope that the new President will be well supported on that occasion also.

The New Minister of Health

We congratulate Mr. Iain Macleod, M.P., on his appointment as Minister of Health in succession to Mr. Crookshank, who continues as Leader of the House of Commons and is a member of the Cabinet, after a brief but strenuous spell of double duty. Mr. Macleod, though young as a Member of Parliament and, we think, the youngest man, at 38, to be Minister of Health since the inception of that office, has been known for some time as a serious student of two subjects with no apparent connection, Social Welfare and Bridge, in the latter of which he has attained international ranking. On the former he, with Mr. Enoch Powell, M.P., another of the young Conservative thinkers, wrote an interesting study, "The Social Services—Needs and Means," to which our President paid considerable attention in his recent address at the Margate Health Congress. We feel that if Mr. Macleod in his new office will respond to Dr. Clark's lead, the National Health Service may assume a more preventive guise, on which assumption we wish the Minister a grand-slam hand.

Comprehensive Dental Service for the Priority Classes and School Children

There has of late been some little disquiet among Public Health Dental Officers regarding the future of their service. This has been augmented by certain statements which have been made in the House of Commons by a former Minister of Health, and by the fact that the policy of the previous Government, when making charges for dental treatment,

i.e., part cost of artificial dentures, was to allow entirely free treatment to "priority classes" only through the local authority dental services. The present Government, however, does not apparently propose to follow this policy of confining free treatment to that provided by local authority dentists in regard to the £1 charge for dental treatment for which provision is made in the Dentists Bill now before Parliament.

In order therefore to allay any misgivings as to the present position, we are glad to be able to publish the following letter from the Minister of Education to Brigadier H. R. Mackeson, M.P., who had raised the matter at the request of Mr. W. W. F. Dawe, L.D.S. Permission for the publication of this letter has been kindly given by the Minister.

Ministry of Education,
Curzon Street,
London, W.1.
March 11th, 1952.

DEAR BRIG. MACKESON,

Thank you for letting me see the letter from your constituent, Mr. Dawe, which you sent to me with your letter of February 28th and which I now return herewith. The policy of the previous Government in regard to the School Dental Service was set out in paragraph 14 of the Ministry of Education Circular 179, which reads as follows:—

"The School Dental Service will, in general, be unaffected. The duty of the Executive Councils under Section 40 of the National Health Service Act to make arrangements with dental practitioners for "general dental services" relates only to those persons for whom a dental practitioner undertakes, in accordance with these arrangements, to provide dental treatment and appliances. The duty to secure a comprehensive dental service for school children will continue to rest on Local Education Authorities by virtue of Section 49 of the Education Act, 1944, and the maintenance and extension of the School Dental Service will be essential for this purpose. It will be noted that a parallel duty with respect to nursing and expectant mothers and children under five (not attending a maintained school) is placed on Local Health Authorities by Section 22 of the National Health Service Act."

This is also the policy of the present Government, and indeed I have already made it clear on several occasions that it is the Government's intention to strengthen and develop the School Dental Service. The Chancellor of the Exchequer also made this clear in his statement on the economic situation on January 29th.

I hope that this letter will help your constituent to dispel any alarm and despondency that he may encounter in regard to the School Dental Service.

Yours sincerely,
(Signed) FLORENCE HORSBUGH.

THE CASE FOR FLUORIDATION*

By G. WYNNE-GRIFFITH, M.D., D.P.H.,
County Medical Officer of Health, Anglesey

Introduction

There is a basic assumption in what follows, *viz.*, that the prevention of dental caries is in itself a worthy aim to be pursued. Let who may debate what harmful effects on the human body are traceable to dental ill health. This is not the place to discuss the arguments for and against. Suffice it to point out that over a period of many years, local education authorities had built up school dental services on the assumption that the dental health of children was deserving of expenditure. It has been the general experience, particularly since 1948, that the school dental service is seeking, with inadequate resources, to tackle an immense problem. In 1950 a random sample of school-leavers (ages 15 to 16) in Anglesey revealed that 92.5% showed evidence of past or present dental disease and a similar state of affairs was revealed among London children recently (Mellanby *et al.*, 1952). Since the National Health Service Act, 1946, came into force the difficulties facing the school dental service have been accentuated and although certain recent developments hold promise of an improvement in the staffing position, nevertheless some years must elapse before the service will be staffed at pre-1948 levels and even those were barely adequate in many parts of the country. It is therefore prudent to give serious consideration to any measures which hold out a promise of reducing dental caries. For that reason alone interest has been growing in the possibilities of fluorine, a chemical element whose relationship to dental caries was suggested as long ago as 1892 by Sir James Crichton-Browne according to Mackenzie (1952).

Historical

A survey of the development of the modern interest in fluorine has been given by Mackay (1942). Since its description in 1908 the condition of "mottled enamel" has been noticed to be endemic in certain communities and on epidemiological grounds some peculiarity of the local water supply was suspected to be the cause of this disfigurement of the teeth. The cause was not finally incriminated until 1931, but it is interesting to note that in the meantime certain American communities which were severely affected acting on the epidemiological evidence had deliberately changed their sources of water supply in the hope of eliminating the condition. Mottled enamel is endemic in many of the central and southern States of America, in certain parts of Britain, notably Malden in Essex, and has also been described in India, Japan, South Africa, Mexico and South America.

By 1931 the cause of mottled enamel had been established as due to an appreciable quantity of fluorides in the water supply, but before this Mackay in 1925 had made the interesting observation that the incidence of mottled enamel appeared to be inversely related to the dental decay rate. Others had made similar observations and in this connection the name of Ainsworth, who surveyed the teeth of elementary school children in Essex, deserves to be remembered (Ainsworth, 1933).

The next great advance is due to Dean and his associates who, over a period of years, conducted a number of detailed surveys of children's teeth in various parts of the U.S.A. From their work emerges a picture, which, in rough outline, may be drawn as follows:—

No fluorine in the water supply—high caries rate, but no mottled enamel.

Moderate fluorine in the water supply—moderate caries rate and slight mottled enamel.

High fluorine in water supply—low caries rate with marked mottling of the enamel.

It would appear, therefore, that there is a point in terms of fluoride concentration where an appreciable diminution

in the caries rate is associated with very slight mottling of the enamel.

Naturally Occurring Fluorides

The amount of fluorine, measured in terms of the concentration of the ion F, occurring naturally in public water supplies varies from 0 to at least 27 p.p.m. (Bull, 1950). Generally speaking, surface waters are relatively free and high concentrations are found in water supplies deriving from deep wells, artesian wells, etc., if the water-bearing strata contain fluorine. In the central states of the U.S.A. water supplies with appreciable fluorine content are frequently encountered as may be seen from the following data which relate to municipal and private water supplies analysed in the State of Texas (Taylor, 1952):—

Water Supplies (Municipal and Private) in State of Texas up to 1948

Less than 1.0 p.p.m.	336
1.0-1.9 p.p.m.	181
2.0-4.9 p.p.m.	109
5.0 p.p.m.	23
	649

Dean and his colleagues took full advantage of the opportunities presented by such wide variations for investigation along epidemiological lines, and in the many papers published by this team during the 10-year period 1933-42 there is a wealth of material from which to choose examples. For the purposes of illustrating the type of evidence presented by them I have selected two instances. Both relate to the caries incidence in the permanent dentition of 12- to 14-year-old children. The first refers to two towns in Illinois (Dean *et al.*, 1939):—

Town	% children caries free	Fluorine content of water supply (p.p.m.)
Monmouth ...	36.2	1.6
Quincy ...	4.1	Trace

The second relates to two suburbs of Chicago (Dean *et al.*, 1941):—

Town	% children caries free	Fluorine content of water supply (p.p.m.)
Maywood ...	29.8	1.2
Evanston ...	3.9	0.0

Similar epidemiological investigations have been conducted in this country by Dr. Robert Weaver. Some of the results he has published (Weaver, 1950) may be tabulated as follows: they refer to the permanent dentition of 12-year-old children:—

Town	% of children with no D.M.F.* teeth	Fluorine content of water supply (p.p.m.)
North Shields ...	26.4	Nil
South Shields ...	50.6	1.4
West Hartlepool ...	59.8	2.0

(* D.M.F. = Decayed, missing or filled.)

A recent survey in this country has been described by Forrest and her colleagues who were able to confirm Weaver's findings for young children in South Shields and added similar results for Slough and Colchester, both areas with naturally occurring fluoride concentrations in the water supply. Compared with nearby fluoride-free areas the caries incidence among, for example, three-year-old children was found to show a reduction of 50% (Forrest *et al.*, 1951).

Evidence of a similar kind has been adduced in other countries and a recent report from Greece may be quoted. The water supply of a town called Lavrion, not far from Athens, contains about 3 p.p.m. of natural fluorides and the caries incidence among native children and adolescents is apparently only a third of that shown by other Greeks of like age (Mavrogordato, 1951).

Artificial Fluorine

It would seem to be a logical step where it is deficient to add fluoride to a water supply in order partially at all events to control the incidence of dental caries, and Dean (1938) suggested that this possibility deserved thorough study.

* Paper read to the Welsh Branch, Society of M.O.H., May 3rd, 1952.

There must have been in the past a number of instances where quite inadvertently the fluoride content of a public supply was appreciably raised. Dean and his colleagues have recorded one such case—a village called Garrettsville in Ohio—where as a result of sinking a new well in 1939 the fluoride content of the water supply was increased from 0.1 to 0.7 p.p.m. (Arnold *et al.*, 1942). Such an occurrence would be fortuitous but in 1945 for the first time the public water supplies of three communities (Newburgh, N.Y. State, Grand Rapids, Michigan, and Brantford, Ontario) were deliberately treated with fluorides.

The following year Marshall, in the State of Texas and Sheboygan in Wisconsin, followed suit and since that time many communities in U.S.A. and Canada have been adding fluorides to the public water supply. In the cases of Newburgh, Grand Rapids and Marshall, neighbouring cities whose water supply do not contain fluorides have been chosen as controls. The experience of the Newburgh-Kingston investigation has been distinctly promising and indicates that artificial fluoride reproduces the effects ascribed to natural fluoride. After three years' fluoridation there was a 59% reduction in caries incidence at ages six and seven years in Newburgh compared to Kingston (Ast *et al.*, 1950). Dean and his colleagues have reported on the results at Grand Rapids, Michigan, where 1 p.p.m. fluorides were added to the water supply from 1945 onwards. After four years' experience the D.M.F. rate of seven-year-old children in Grand Rapids was only 55% of that observed in the comparable township of Muskegon whose water supply contains only a trace of the element. This investigation is of particular interest because contemporaneous surveys were made in the town of Aurora, Illinois, where the water has a natural fluoride content of 1.2 p.p.m. The Grand Rapids figures approximate closely to those of Aurora at the younger ages while for older children the D.M.F. rates of Grand Rapids children fall intermediate between those of Muskegon and Aurora, a result to be ascribed presumably to the relatively limited exposure of this age group at Grand Rapids (Dean *et al.*, 1950).

The results for Brantford, Ontario, have also been published (Hutton *et al.*, 1951). This town added 1 p.p.m. from 1945 and increased the concentration to 1.2 p.p.m. in 1949. Compared with the results of a survey carried out in 1944-45 the average reduction in D.M.F. rate by 1950 was of the order of 30%, being as high as 50% in the younger children. This is not a "controlled" investigation so that the possibility of an improvement in D.M.F. rates occurring independently of fluoridation cannot be excluded. The town of Evanston, Illinois, commenced to add fluorides to the public supply in 1947 and after two years a reduction in caries incidence of 45% among six- to eight-year-old children was claimed (Hill *et al.*, 1950).

In Connecticut the State authorities commenced fluoridation of the water supply to a training school of 255 children in 1945 and 207 children in a neighbouring training school were observed as controls (Erlenbach and Tracy, 1946). At the end of the second year there was a difference of 27.8% in the caries incidence of the two schools.

The experience of these various transatlantic investigations would seem to indicate that some effect can be discerned after as short an interval as two years. By the end of four years the results would seem to be unmistakable, particularly among the younger children, but American writers maintain that the full effects cannot be assessed until at least 10 years have elapsed. Nevertheless, artificial fluoridation is already being used on an increasing scale in the U.S.A. and Canada. Upwards of 200 cities and towns, including such large cities as Washington, D.C., Baltimore and Seattle, are said to be using fluorides at the present time or to be actively preparing to do so.

Objections to the Artificial Fluoridation of Water Supplies

(1) *Toxicology.*—It is argued that fluorine is a poison and the effects on the human metabolism of adding fluorides are

imperfectly understood. For that reason "mass medication" so called is unjustifiable. While it is true that fluorine in adequate dosage is toxic and a fluorosis risk is met in certain industrial processes (Med. Res. Council, 1949) there is no evidence that fluorine has any harmful effects in the dosage suggested for the treatment of water supplies. Schlesinger and his colleagues (1950) have subjected a sample of Newburgh, N.Y., children to careful radiological, ophthalmological, haematological, etc., examinations but no harmful effects could be detected. It is estimated that 3,000,000 persons in U.S.A. have for many years been using water supplies containing more than 1 p.p.m. of fluorine and the only effect noticed has been mottled enamel and this only becomes a problem when a certain concentration is exceeded. McClure (1944) analysed the heights, weights and fracture histories of nearly 4,000 youths and young men and concluded that there was no evidence that residence in a fluoride area had any deleterious effect on growth or skeletal function. It is notoriously difficult to "prove a negative" and should not the onus of showing that artificial fluoridation properly controlled is a danger to life and health be placed on those who take that view?

(2) *Ethical.*—It has been argued that no authority has a moral right to impose a fluoridated water supply on the public but in this year of grace this "ethical" position is not easy to maintain. Mackenzie (1952) has pointed out we have come to accept the addition of vitamins to food, of calcium to flour, of iodine to salt, etc., and can there be any objection, then, to the fortification of the water supply with a trace element such as fluorine? I do not know to what extent it is proper for us as officers of local authorities to concern ourselves with the "ethical" argument. I regard it as my function to acquaint my authority with the facts, to advise them on the implications of those facts and to leave them to wrestle with the "ethics" of the matter. This, of course, is another way of saying that an officer's function is the implementing, rather than the formulating, of policy.

(3) *Transitory Nature of Effects of Fluorine.*—It has been argued that the general adoption of fluoridation of public water supplies would not be worth while because although admittedly children derive some benefit the effect is of a transitory character and has disappeared by early adult life. This argument, even if the premises were sound, seems to me to be a poor one because it would surely be worth while improving the health of children's teeth if that can be done at relatively little cost. There is, however, some conflict in the evidence concerning the major premise. Weaver maintains that the effect of fluorine is merely to delay the onset of caries by five years or so (Weaver, 1950) and in favour of this view he quotes the results of examining 100 mothers attending Infant Welfare Centres at West Hartlepool. Two criticisms are suggested: first, that mothers attending Infant Welfare Centres cannot be regarded as a representative sample of the adult population (in passing it might be noted that the conflicting opinions that have been expressed on this subject are partly the result of the inherent difficulty of obtaining a representative sample of adults, a difficulty which does not arise with children who can be examined at school), and secondly, Weaver does not quote the caries incidence of a similar sample of young mothers in fluoride-free areas. His results indeed are difficult to reconcile with those of, for example, Forrest and her colleagues who examined adults in high fluoride areas and compared them with a sample of adults in low fluoride areas. Their results indicate that a reduction in caries incidence is discernible at least up to the age of 40, although admittedly the benefit of fluorine appears to become progressively smaller with advancing years (Forrest *et al.*, 1951). American experience, too, suggests that the benefit of fluorine can be detected well into adult life. This is the opinion of Mackay based on his work at Colorado Springs (Mackay, 1948) and an examination of selective servicemen for the U.S. armed forces showed that adults coming from fluoride areas had considerably less caries than those from fluoride-free areas (Deatherage, 1943 (a) (b)).

(4) *Alternative Methods of Using Fluorine.*—The suggestion that fluorine can be used by fortifying flour, milk, salt, or some other food will not bear careful scrutiny. There are considerable variations in individual intakes of these foods and therefore the possibility of ingesting toxic quantities is not to be discounted. In addition, because of local variations in the fluorine content of the water supply it would be necessary to have these foods "tailor-made" for different areas if the danger of dental fluorosis is to be avoided. An alternative method which has been tried experimentally is the topical application of fluorine. The pioneer in this field has been Knutson, who has developed a technique which calls for a preliminary scaling of the teeth followed by the application of 2% solution of sodium fluoride which is then allowed to dry. This process is repeated at weekly intervals until four applications have been given and Knutson recommends that the whole procedure should be given at ages 3, 7, 10 and 13 years. Using oral hygienists for the work of scaling and applying the fluoride solution, a properly organised programme can be conducted at a cost of approximately six dollars per child. The original reports claimed a reduction in caries incidence of the order of 40% (Knutson and Armstrong, 1943) and this improvement is maintained at least for three years (Knutson and Armstrong, 1946). Omission of the scaling has the effect of reducing the percentage improvement to approximately 20% (Knutson *et al.*, 1947). At the present time experiments are being conducted in this country on the use of topical fluorine (Report of Ministry of Health, 1950) but the results have not yet been published. American opinion would seem to be that topical fluorine is more expensive and less effective than the use of fluorine in the water supply.

Technical Aspects of Artificial Fluoridation

The case for fluoridation would not be complete without consideration of the administrative and technical aspects of the procedure.

(a) *Dosage.*—Excessive dosage will give rise to "mottled enamel" and in practice the question to be settled is—what is the threshold level of fluoride which produces this condition? Dental fluorosis can present appearances ranging from slight patches of white smooth enamel to gross discoloration and disfigurement. In its mildest forms the condition is only recognisable by expert examination. As the inhibitory effect of fluoride on caries is directly dependent on the concentration, it is desirable to use the highest concentration which will not interfere with the aesthetic appearance of the teeth. On the basis of his wide experience Dean considers that concentrations of 1.2 or 1.3 p.p.m. will result in "border-line" dental fluorosis, that is to say, although the condition may be detected on careful examination in a proportion of the population (10 to 20%) severe cases obvious to the inexperienced eye do not occur. Even at concentrations of 2 p.p.m. only 1 to 2% of the population will show severe dental fluorosis (Dean *et al.*, 1941 and 1942). Weaver in West Hartlepool, where the concentration of fluorine is 2 p.p.m., found the incidence of obvious fluorosis to be so high among adults "as to rule out any idea that drinking water should be artificially fluoridated to a level of 2 p.p.m." (Weaver, 1950). It would seem therefore that a dosage which brings the total fluoride content of a supply up to 1 to 1.2 p.p.m. could be safely used. In U.S.A., where extreme variations in climatic conditions are encountered, it has been found necessary in some areas to vary the dosage according to the mean temperature and humidity (Maier, 1950). This, however, is not likely to be needed in this country.

(b) *Chemicals and Cost.*—The chemical most commonly employed is sodium fluoride, which contains 45% "available" fluoride ion, but the cheaper compound, sodium silico-fluoride, which has the added advantage of containing 60% "available" fluoride ion, is becoming popular in U.S.A. (Maier, 1950). This chemical is a

by-product of the manufacture of phosphates and at a price of 7 cents per lb. chemical manufacturers in U.S.A. are finding it profitable to produce. In exceptional circumstances hydrofluoric acid has been employed but this calls for specially designed plant because of the highly corrosive properties of the compound.

According to the latest information available the cost in this country of sodium fluoride (technical grade) is 13s. per cwt., but I have been unable to obtain quotations for sodium silico fluoride. The cost of chemicals for treating 1,000,000 gallons of water to give 1 p.p.m. fluoride ion is 28s. using sodium fluoride (technical). Given a daily consumption of 35 gallons per head of the population the cost of chemicals works out at 4½d. per capita per annum.

(c) *Feeders.*—The chemical may be fed into the water supply either in solution or in solid form and the plant employed does not differ in essentials from that used for water treatment with conventional chemicals. The method used will depend primarily on the size of the water supply being treated. For supplies exceeding 2,000,000 gallons a day some form of solid feeder would probably be necessary. These feeders, according to their design, will deliver to the supply a measured volume or a measured weight of chemical in a given time.

Precautions have to be observed in handling the chemicals to ensure the suppression of dust otherwise there is a hazard of fluorosis among the operatives. It is sound practice to treat the chemical with a dye in order that it may be readily distinguished from other chemicals (such as lime, alumina, etc.) used in the treatment of water. Alum and lime are liable to "remove" a proportion of the fluorides in solution and some may be lost in filtration. It is therefore customary to add fluoride after all other necessary treatment of the water has been completed (Maier, 1950). Fluorides in the concentrations recommended will not react with any of the chemicals normally employed in the purification of water supplies (Mackenzie, 1950).

(d) *Control.*—Regular testing of the supply is necessary in order to ensure that the level of fluoride is properly controlled. A colorimetric method of assessing the concentration is available which is accurate to within at least 0.2 p.p.m. (Bull *et al.*, 1951). Periodic analysis of the water supply by more refined methods in an analytical laboratory is also recommended.

(e) *The Legal Position.*—Water authorities have a statutory duty to provide a wholesome water supply and if, in the discharge of that duty, they find it necessary to treat the water before distribution their action in so doing is unobjectionable on legal grounds. The position with regard to adding fluorides is, however, quite different and the legal position is not entirely free from obscurity. In the case of a Council which is both a water authority and a local health authority it would appear possible for the Council to amend its Proposals under Section 28 of the National Health Service Act, 1946, to include the fluoridation of water supplies as a measure for the "prevention of illness" and provided these Proposals were duly approved by the Minister the Council would be able to proceed with its project. Generally speaking it is only County Borough Councils that are both local health authorities and water authorities. In counties the usual position is that the County Council is the local health authority and the non-County Boroughs or District Councils are the water authorities (there is only one exception of which I am aware, namely, the Council which I serve, which is a water authority by virtue of a Private Act of Parliament). There is no provision in the National Health Service Act, 1946, for the delegation of functions to District Councils as such and indeed because the County Council is required to set up a statutory Health Com-

mittee it is precluded by Section 274 of the Local Government Act, 1933, from making any such delegation. It would seem, however, that there would be no objection to the County Council (with the approval of the Minister) amending its Proposals under Section 28 to enable them to enter into arrangements with the Water Authority for fluoridation of water supplies, the County Council agreeing to indemnify the Water Authority and to meet the cost of the process.

Conclusions

At the time of writing a mission from the Medical Research Council is visiting the United States to investigate American practice in artificial fluoridation. The attitude of the Ministry of Health to any projects for fluoridation of public water supplies was communicated to the Anglesey County Council in October, 1951, when the latter had applied for ministerial approval to undertake the fluoridation of the County Water Scheme. The official view was that if the mission reports favourably certain pilot schemes would probably be instituted in this country before any general approval would be forthcoming. The cost of general dental services at the present time is approximately 20s. per head of the population per annum (Report of Ministry of Health, 1950) while the cost of fluoridation is a few pence per annum. Although no one claims that fluoridation is the complete and final answer to the question of dental caries, nevertheless, if a reduction of 40 or 50% in the incidence of dental disease can be effected at an annual cost per head of the population of two or three cigarettes, and the evidence for this seems to be overwhelming, then the question arises—Are we really justified in withholding the procedure any longer?

I acknowledge gratefully the advice of Mr. William Jones, O.B.E., Clerk of the Anglesey County Council, on the legal aspects of fluoridation.

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ORTHODONTICS IN THE SCHOOL DENTAL CLINIC*

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What do we mean by Orthodontics and what is its scope? There are many and varied definitions, but there are two I would like to quote. The American Dental Association has recently described orthodontics as "the detection, study, prevention and correction of irregularities in tooth position and jaw relationship and deformities of the face produced by these conditions." The British Society of Orthodontics has adopted this definition: "Orthodontics includes the study of the growth and development of the jaws and face particularly and the body generally as influencing the position of the teeth, the study of the action and reaction of internal and external influences on this development and the prevention and correction of the arrested and perverted development."

This sounds rather complicated and a little "high falutin'." But if we analyse it we find that it starts with the study of the normal, goes on to aetiology and ends with treatment. And that, I suggest, is the correct approach to the subject. In other words, one must form a true picture of the case, make as accurate a diagnosis as possible and then consider treatment. After all, malocclusion is an abnormality within the body tissues; and just as the treatment of any medical or surgical abnormality depends on correct diagnosis, so first must we endeavour to diagnose correctly. I would go further, and say that treatment or the knowledge of the various ways of treatment is far less important than coming to a true diagnosis of the abnormality. Do not misunderstand me there; what I am trying to emphasize is that it is far less important to know the many intricate appliances now used than it is to have a general concept of diagnosis. If those who have the primary care of the child can come to a fair appreciation of the case the chances of prevention are much greater; with such a concept of what is wrong a better idea can be formed of when to treat or refer for treatment and perhaps, above all, when not to step in with some expedient such as extraction in order to satisfy a worrying parent.

So we come to the fundamental question of diagnosis. I am not going to attempt to go fully into this subject now, but I think we should endeavour to get some picture in our minds of the various factors to look for in forming an appreciation of the case.

First of all, one should have a concept of the normal. If I may be absurd enough to state that the normal does not exist, I only wish to emphasize that there are in fact many variations within the normal and what we really mean is the average of what appears to be normal. Many American writers will give masses of figures and tables, angles and distances, divide them all up and then quote an unimpeachable normal. But for this many factors must be considered, and probably chief among them are racial characteristics. The mere fact that a child's name is Smith does not exclude the possibility that the father may have been from some Slavonic or Eastern European country. But seeing the number of children that dental officers do, they can, I think, form a reasonable idea of whether development is proceeding normally or not: but here let me add that, to parents especially, normal development often appears to be incipient malocclusion. The very common worries are lower incisors erupting lingually to the temporary teeth, and the marked irregularity of upper lateral incisors under pressure from erupting canines. Both are normal, but appear terrible to parents concerned with their daughters' future beauty. I should like to say that if in doubt assure the parent that you will keep the

* Address to the Dental Officers Group, Society of M.O.H.

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child under observation—and wait—wait even until all premolars and canines are through; but of that, more a little later.

When convinced that malocclusion is developing, then try to diagnose the case. For this accurate models are essential, and also x-rays of all unerupted teeth—including third molars, which are usually visible from about 10 onwards. If I may add a word of warning: never assume the presence of permanent teeth until confirmed by x-rays. I think one should approach diagnosis in a systematic way; and I should like briefly to discuss it under four main headings.

(1) *Skeletal Pattern*

The appraisal of this factor is fundamental. What do we mean by skeletal pattern and can it be changed? Briefly, it is the relationship of the mandible to the maxilla. Try to envisage the complete absence of teeth and alveolus, and then relate the basal bone of the mandible to that of the maxilla, using the familiar angle classifications of Class I, II and III*; we then have our main classification of Skeletal I, II and III. It is here that cephalometric analysis is so helpful and important, as it is by the use of lateral skull x-rays that one can assess the skeletal pattern correctly. Yet a fair idea can be gained by clinical examination, and it is only in the more difficult or borderline cases that we sometimes feel bound to resort to x-ray examination.

Having assessed our skeletal pattern, where does it lead us, and how does it help in diagnosis? I now enter the field of controversy and I am not in a position to be dogmatic. Yet Broadbent has stated that the skeletal pattern is laid down early in life, and thereafter cannot be altered.³ At first he put the time as early as the sixth or eighth month, but he has recently modified that to about two years old. But all scientific research of the last few years has shown that the jaws, as well as other parts of the body, follow a definite pattern of development; and that in this development, heredity plays a major part.

It is true that local aetiological forces of both a pressure and tension type can cause deformities, and that on removal of those forces, growth does catch up to a considerable extent. But such growth is still within the genetically defined structure, and even then, when growth is once lost, it seldom assumes its full and true pattern.

It therefore follows that orthodontic treatment cannot alter the basal bone of the jaws, nor the fundamental relationship of the one to the other. I will not state dogmatically that, in a Class II case, the mandible cannot be brought forward; but, unless there is originally some obstruction or over closure present, there has, as yet, been no scientific proof that the mandible is brought forward: rather, x-ray analysis shows that, even where normal occlusion of the teeth has been established, the relationship of the basal bone of the mandible to the basal bone of the maxilla remains unaltered, and only the inclination and position of the teeth themselves have been changed.

Tweed has stated that in Class II cases we actually stimulate dormant growth factors in the body of the mandible, but even if this be true—and I doubt it—we still do not alter the position of the condyle in the fossa. Our orthodontic appliances exert only weak forces, and these are exerted on the teeth which are themselves anchored in the alveolus; the alveolus, which is, physiologically, plastic bone, is itself a separate entity from the basal bone of the jaws and so why should a force exerted on a "plastic" substance fundamentally alter a rigid and compact entity?

Here then is our reason for assessing the skeletal pattern: it is a firm indication of treatment, as it tells at once the trend treatment must take, the result to aim for and the possibility of achieving that result.

*Note.—In general terms, Class I refers to cases where the teeth and jaws are in normal relationship; Class II to those with protrusion of the upper jaw; and Class III to the underhung or protruding mandible.

(2) *Muscle Pattern*

Here again we are in the field of controversy, but perhaps the controversy is more one of emphasis than of degree. I think it is agreed that the teeth take up their position in an equilibrium between the muscle forces acting on them. Internally, there is the tongue; externally, the cheeks, lips, muscles of mastication and muscles of expression. If one of these forces is definitely out of balance, the teeth may be affected. Mr. Gwynne Evans gave a most informative paper on this subject at the recent annual meeting of the British Dental Association, and it has subsequently been reported in the *British Dental Journal*.⁴ Rix has been studying the problem for many years, and now believes that the different patterns of swallowing each has its own related effects on the dento-alveolar structure.⁵ I think that the main conclusion has been firmly established that the failure of the swallowing mechanism to mature does definitely cause dental abnormalities. Whether any correlated effects can be established is a matter for some of the extensive research now being carried out by Gwynne Evans, Ballard, Rix and others. Also how far this muscle patterning can be attributable to heredity and how far only to acquired habits, is a matter of supreme importance to the orthodontist. Yet I do feel rather strongly that it is the orthodontist's task to correct the malocclusion before an attempt is made to re-educate muscle pattern. This re-education, involving as it does a conscious effort on the part of the child before the pattern is subconsciously altered, is a very difficult thing to achieve: that success probably depends on it, I have no doubt in many cases. But to give a child more chance to achieve that re-education, I feel we must do our best to approximate the dental tissues to as near the normal for the child as is possible to attain. The whole question of muscle patterning and muscle balance is of prime importance in the stability of our cases, and undoubtedly one of the main reasons why excellent orthodontic results collapse is because we have not taken into account the varying muscle forces, or have not attempted to re-educate an abnormal pattern.

(3) *Abnormalities Within the Dental Arches*

The more obvious ones to look for are the absence of permanent teeth, the form and size of the teeth as related to the development of the jaws, the position of the centre line, the plane of occlusion and the depth of the overbite.

(4) *Habits and Local Conditions*

Here look for past illnesses, the general state of development. Always look at the parent and try to get some idea of heredity. Try also to get accurate dates and reasons as to why temporary or permanent teeth were lost prematurely.

Selection of Cases for Treatment

I have attempted very sketchily to put before you the way we now approach diagnosis and I would now like to go a little more closely into the question of how we can attempt to carry out orthodontics in the school clinics and, indeed, in general practice and to show how the dental officer can be of very valuable assistance to the specialist. Dr. Kenneth T. Adamson, of Sydney, has recently delivered a lecture on this subject, and he states: "Many practitioners have come to regard orthodontics as something quite outside their sphere. They hold the mistaken idea that orthodontics begins and ends with complicated appliances, while nothing could be further from the truth. Interest in the subject does not necessarily imply specialisation, but an intelligent appreciation of possibilities. Indeed, the general practitioner shares with the specialist the responsibility for providing orthodontic treatment. A close and understanding co-operation between the two should provide a type of service to suit any purse."⁶ I think that states the facts very clearly, and there is much the general practitioner can do. This is especially so in the school clinic. I am constantly horrified at the volume of

necessary orthodontic treatment which continues to pile up, and of the relatively few cases I treat; and, of course, the question inevitably comes, are we to treat a few properly or the mass in a very limited way? Specialising as I do in orthodontics, I try to treat all cases to the best of my ability, but this inevitably means full treatment for the selected few, and no treatment for the mass. Strange, of New York, toured Europe some time last year and heard Prof. Hotz, of Zurich, lecture on this very subject. Hotz was reviewing the "Aims and Limits of Orthodontic treatment in Social Service," and said that throughout Europe there was a spirit of "national health" everywhere, that everybody wanted to gain something from a social benevolent society. To satisfy this aim we must limit the aims of treatment and elaborate the simpler methods of treatment. Hotz admitted that the criticism of deterioration of treatment would be levelled at him, but considered it more practical than only the full-scale treatment of a small percentage.⁷ Strange, of course, holds the opposite view as in the States they will only give the elaborate treatment for the minority.

I, personally, feel that we must get somewhere between these two views. The orthodontic problem in the clinics is so colossal that we cannot treat all—at least until the number of orthodontists increases by many hundreds, and until the authorities will bear the enormous increase of cost that this would involve. Yet we cannot pick the odd one here and there and use continually our most elaborate appliances. The sorting out must be the problem of the general practitioner and the specialist must do everything he can to treat the more complicated cases and to give every help and assistance to the general practitioner in the field of prevention and in the use of simpler appliances. I do not think we should allow much deterioration of treatment. That, after all, is the line of least resistance and nobody would benefit. But there are many cases where a perfectly good 95% result has been obtained. The orthodontist knows he can get near to his 100% aim, but that it might take a further year to do so—time, in fact, to treat another case. That degree of deterioration, I think, we must accept.

Prevention

The one paramount way to cut down treatment is by prevention, and there is no doubt at all but that this question has been sadly neglected in the past few years. When I hear that certain Authorities have stopped filling temporary teeth, and have only time to organise mass extraction clinics, I hold up my hands in horror and wonder where Social Security is leading us! I know full well that the numbers who have loyally stuck to the School Dental Service are small, and that the time of the general practitioner is booked for weeks ahead, and that they are often over rushed even to relieve pain. I also know of the still appalling lack of dental education of the mass of the population and that many children are brought to the clinic only when abscesses form or pain is acute. But may I emphasise again that only by prevention can we hope to solve the orthodontic problem.

What are the main means of prevention? First, the retention of the temporary dentition until it is due to be shed. An ideal, no doubt, but one to which we must all continually strive. Then there are space retainers for those teeth unavoidably lost. Once again the ideal is for all such spaces to be retained: but some are more important than others. If upper second deciduous molars are prematurely lost, the first permanent molars will at once rotate forward: similarly, if lower first deciduous molars are lost early, the permanent incisors will collapse lingually. If only a little time were spent in retaining lower spaces in incipient Class II cases, many months of the orthodontists' time would be saved. So may I put in a plea at least for such space retainers to be fitted: a night time removable plate is sufficient, but they are really vital and may make

all the difference later between a poor and excellent orthodontic result.

Habits

Another big problem in the field of prevention is the question of habits. The parent can generally give a fair history, the patient may or may not acknowledge the fact, but always the poor general practitioner is asked how to cure the habit. I cannot go very fully into the subject now and I do not intend to catalogue all the various habits known. Rather, I wish to look at the matter from the angle of how the practitioner can help the orthodontist, and perhaps also help the parent.

There are, of course, very many varieties of habits and many individual variations; but do not assume that every habit will cause malocclusion. There are many persistent thumb suckers with perfect dentitions and many bad Class II cases who have not sucked thumb or finger after infancy. But it is the question of thumb sucking, and its allied habits of finger sucking, lip biting and sucking, and nail biting, which give the parent the most worry.

Recent investigations have shown that well over 50% of infants indulge in thumb or finger sucking until practically all the temporary dentition has erupted, that is to say up to the age of two and a half or three years. This should be regarded as normal and no undue fuss made about it. In many children after that age it persists only as comfort when the child is tired or feeling unwell, or as an inducement to sleep. I suggest that in these cases also little fuss should be made. After all, the sum total of time does not probably exceed 15 minutes per day, and although I would not suggest that no malocclusion can result, I think it is unlikely. Admittedly, it may increase proclination of upper incisors in Class II cases, but I think that the sum total of damage done is small. Then there is the persistent thumb sucker. The mother has threatened, put alum on the offending member, bound up the hand, promised inducements—everything she has heard or can think of—but all to no avail. The best advice the practitioner can give is to tell the mother to do precisely nothing. This may sound absurd, but it is being proved right time and time again—and the mother has admittedly got nowhere with all her threats. The indulgence in habits which give comfort to the child generally have their aetiology in some emotional upset in that child's environment. To trace that aetiology is difficult, and requires the skill of a trained psychiatrist; but he need seldom be necessary. The child generally requires the extra attention which the habit brings him; if he is seeking comfort, he will continue to do so, or more so still, when threats are applied. So, stop the mother from doing anything about it and let everybody in the family ignore the habit.

Beyond that, what can be done? Generally speaking, any appliance at all inserted in the mouth will do: but the child must be made to believe that the appliance has been inserted for the sole purpose of making the teeth straight, and has no connection with the habit—otherwise it may not be worn. Certain of the older children will co-operate, and to them can be explained the dual purpose of the appliance, but in younger children a call to vanity often works wonders. An Andresen appliance or an oral screen are perhaps the most effective, but if the connection with these appliances and the habit is too obvious, a simple plate with a labial bow will generally be just as effective. The mere fact that there is something covering the palate will generally destroy all satisfaction obtained from the habit.

Mouth Breathing

Another worry to parents and practitioners alike is so-called mouth breathing. I have said "so-called" because the great majority of children who keep their lips open do actually still breathe normally through their nasal passages; in fact, investigation has shown that about 95% of assumed mouth breathers are not actually mouth breathing at all.

If the nasal airway is obstructed, that is a job for the surgeon and is beyond our sphere. But the 95% are our problem. Often, of course, in bad Class II cases, it is physically difficult for the child to keep his lips together—so the open mouth posture develops. In such cases the cure of the abnormality will cure the habit. Yet there is still a large percentage where the open lip posture develops early and can be a powerful factor in the aetiology of malocclusion. This should be corrected early and every inducement given to the musculature to develop correctly. Rogers, of America,⁸ sets great store by series of exercises which he has devised; if carried out conscientiously over a period of several months, these will often prove effective. Otherwise mechanical control with an oral screen or Andresen appliance will often cure the habit.

But, just as habits can cause malocclusion, so can malocclusion lead to habits. Very protruding upper incisors can lead to lip sucking and can be the cause or effect of an abnormal swallow. I therefore believe, as I have stated earlier, that it is only fair to a child to correct malocclusion at the same time as attempting to correct a habit. To obtain normal occlusion is the surest framework on which to induce normal muscle function. If both can be done together, so much the better; but if the choice has to be made I would rather treat the malocclusion first even if this may necessitate using fixed appliances with greater and more prolonged force than a habit can exert.

Age to Commence Treatment

One other factor on which I would like to enlarge somewhat before finally passing briefly to the subject of treatment is this vexed question of when to commence orthodontic treatment. Here I have rather strong ideas, but I think it is better to state my own feelings even if I should be a little dogmatic. It is a question of vital importance to the general practitioner both in his relation to the parent and to the orthodontist. Personally, I consider the ideal time to commence treatment is about 12 years of age. Certain obvious faults should be corrected earlier, and these I will suggest later. Generally speaking, the best age is that period immediately following the eruption of the permanent second molars. At this time the full volume of tooth substance is present, with the exception of the third molars, and their presence or absence can by then be ascertained. In addition, the individual growth pattern is firmly established, there are sufficient teeth to support any form of appliance, and the patient can better tolerate the wearing of appliances and will co-operate more fully.⁹ These factors are, of course, all present if one wishes to commence treatment any time during the 'teens—or even beyond. I think we must rid ourselves of the theory that orthodontic treatment must be commenced early to be effective—and the earlier the better. The reverse is much nearer the truth. One of the most successful cases I have ever treated was a girl of 18, and treatment then took 18 months.

If we accept the theory that alveolar bone is physiologically plastic, we should be able to carry out orthodontic treatment at any age; and that is fundamentally true. Bone substance does, however, tend to change as the subject gets older, and the greater concentration of lime salts tends to make movement more difficult. But teeth do not become set in the bone from a certain given age: they are always subject to muscle pressure and the stresses and strains of occlusion. Also, one has to take into account the reaction of the patient to wearing appliances which show—and it is hardly fair to ask a young married woman to wear an oral screen every night for a year. Also, many girls of 17 will object to having all their upper incisors banded. But these considerations apart, the teenager is by far the best orthodontic patient from nearly all aspects.

In all this discussion of age, one must be careful to differentiate between dental age and chronological age; I am speaking entirely of dental age.

If we may analyse for a moment the three periods of dentition—primary, mixed, and permanent—we can suggest

cases which should be treated in these periods. In the primary dentition, treatment should be limited to those conditions which prevent the normal development of occlusion; these are mainly, the extremes of disto- and mesio-occlusions and the correction of anterior and, sometimes, posterior cross bites. It has been demonstrated on monkeys that if the primary tooth is moved, the permanent tooth bud will move in the same direction as the apex of its predecessor.¹⁰ Any movement must therefore be carried out bodily as a tipping effect on a temporary tooth may move the apex in the opposite direction.

It is in the period of the mixed dentition that much controversy arises. Personally, I prefer to confine myself to such obvious factors as the elimination of supernumeraries, the correction of labioversion of maxillary incisors, the definite malocclusion of individual teeth, and the possibility of control of habits. How often has one started treatment at seven or eight years and by nine or 10 begun to see good results, and then had that exasperating hiatus of 18 months when teeth are being shed all over the place and practically no appliances can be worn.

Also I am firmly convinced that treatment, once started, should be completed as soon as possible—and one cannot think of dismissing any case until the permanent dentition is fully through. I have recently seen many cases in which treatment was started early, where the child has been wearing appliances for five or six or even eight years and still the end is not in sight. This cannot be good orthodontics, and when, in the school clinic especially, so many hundreds are waiting, it just is not sense. This is one of the chief ways in which the school dentist can help the orthodontist—by not getting impatient with a nagging parent urging him on to do something, which something is generally extractions. I should like to stress very definitely this principle of delaying until at least the majority of the permanent dentition is through, and treating cases in the period of the permanent dentition. It is one of the answers to treating as many cases as we can, and anyhow, in my opinion, gives both the patient and the orthodontist the best chance of achieving success in as short a time as possible.

I have mentioned worrying parents on several occasions—they generally at least have the merit of being enthusiastic. But nowadays there is most definitely the other type who are really very indifferent or interested only to the point of getting something more than the person next door—and that still for nothing. Parents should be told exactly what orthodontic treatment means and its disadvantages stressed before they are referred to the specialist for treatment. The specialist really does look to the general practitioner, with his greater knowledge of the individual parent and child, to weed out those not likely to co-operate. There will always be a certain percentage who fall by the wayside after a few months of treatment, but these must be cut down to a minimum and treatment not started if there is a big doubt as to whether they will see it through.

Treatment

On the subject of treatment I do not propose to enumerate the various methods nor to assess the value of the various schools of thought. I rather wish, briefly, to take one or two main headings and more or less to make notes under those headings which I hope will be of use to those who undertake orthodontic treatment.

I, personally, think that specialisation in any branch of medicine or dentistry can be carried too far; while there must be a certain number who specialise on any given subject for the benefit of research and for the more comprehensive treatment of difficult cases, that should not exclude any practitioner from practising his subject throughout its full scope. That certainly applies to orthodontics in the school clinic. I have attempted to outline a general approach to the subject; and provided some such approach is used and a diagnosis made of the case, a tremendous amount of very necessary and beneficial treatment can be carried out by the school dental officer. Such treatment

must essentially be simple, as time is one of the biggest governing factors.

Extractions

The first main heading which arises, therefore, is the difficult and vexed question of extractions. This can be a subject of a paper in itself, and I shall leave out much more than I can say. Yet, I think the approach to extractions can be logical. Fifty years ago, Angle preached the doctrine that the Almighty gave us jaws and a set number of teeth, and the two must always fit. This non-extractionist school of thought still lingers on and is still very strong in places. Yet more recent ramifications into the whole question of heredity and its allied subjects have shown that the development of teeth and jaws may not necessarily be governed by the same hereditary trend, and that very often the two just do not fit. The unalterable factor is the size and shape of the basal bone of the jaws to which the teeth must be made to fit. If this means a reduction in numbers I, personally, see no other answer. But we must have a sound diagnosis behind us, and know what we are attempting to achieve by those extractions.

Perhaps the most common difficulty applies to Class II cases and those which are also Skeletal II. Here, very simply, we are attempting to move everything in the lower arch forward and everything in the upper arch backward. It therefore follows that while extractions should be considered in the upper jaw, in the lower they are contra-indicated. May I please put in a plea that just because lower first and second premolars are excluded lingually they should not be automatically extracted. The early loss of first and second deciduous molars may have led to an incisal collapse which can easily be corrected. As a general principle, every effort should be made to preserve the lower arch intact in all Class II cases, otherwise the prognosis will be poor. In the maxilla the picture is different. A good half-plate x-ray will very often show very dramatically that the main trouble diagnostically is a shortening of the antero-posterior length of the maxilla, with the teeth radiating from a contracted arch; incisors and canines are proclined, premolars are upright and molars slope distally—in fact, an excellent picture of a fan. If such is the case, extractions are nearly always necessary and the choice generally falls between first premolars and second permanent molars, unless caries decides otherwise for us. I, personally, like to treat Class II cases by the extraction of second permanent molars; the buccal segments can then be moved distally quite easily, and once those are in correct relationship, it is not difficult to align the incisors. A Johnson twin wire arch will do the whole treatment in under a year. But the removal of these teeth does often mean fixed appliances and it definitely does mean traction; at times traction is contra-indicated, especially when the lower incisors are already upright or already proclined. Then the choice must be upper first premolars. Here the technique is simpler, involving the retraction of canines, followed by incisors—operations which should be done separately, but both simple with removable appliances. One point to watch is that the buccal segments do not drift forward. This can easily happen under too excessive pressure on the canines or more commonly if no appliance treatment is used after extractions. I have seen a case which had all first premolars extracted—perfectly correctly I am certain—but which was left for 18 months, during which time the spaces closed entirely from behind, so nothing at all was gained, but prognosis was almost hopeless.

As for extractions in Class III cases, the amount of basal bone present will generally be the deciding factor. Very often the maxillary arch is small, and although we would dearly like to accommodate all the teeth, it may be just impossible. We must at times resign ourselves to the extraction of first premolars to accommodate canines which are excluded buccally. One point of interest in Class III cases is that spaces in the mandible are always very difficult and often impossible to close. We may think it an excellent idea to extract a premolar either side and retract the canines

and incisors so that they are inside the maxillary incisors and an overbite established. Theoretically, this is sound; but practically it is often most difficult and we are left with more than half the space remaining, a poor aesthetic result, no overbite and the fervent wish that we had not extracted.

I think that the second guiding rule when contemplating extractions should be to assess the angle of the teeth which are to be moved into the space created. This is very logical and very important. Teeth will not be moved—at least to remain stable—much beyond their true inclination. If a canine is already retroclined, the extraction of a first premolar will only make matters worse. If we have a shift of a centre line to the right with everything inclined that way and therefore overcrowding on that side, extractions are more often indicated on the left, so that the inclination of the teeth can be corrected. The whole approach to extractions must be logical and methodical, but with those principles in mind, many difficult cases can easily be sorted out.

Expansion

The next main heading is expansion. I will not be controversial for more than a moment, but I believe, as a general rule, that expansion is worse than useless. To start with, under muscle pressure from the cheeks, relapse generally occurs; but often it is worse than that. If the main trouble is a shortening of the maxillary arch antero-posteriorly, everything is attempting to move forward under pressure from erupting molars for which there is insufficient room. Expansion will create a little more room, the teeth will move forward into that space—and then the expansion collapses. The net result is worse than when we started, as the buccal segments have edged that little distance further forward. If a cross bite is present—and usually it is unilateral—expansion may well be the answer. In such cases, with careful clinical examination one can often detect a slight swing of the mandible to one side on occlusal contact, thus giving a unilateral cross bite, but the fault is probably bilateral and will be cured by slight expansion. So one must not condemn expansion out of hand. But if it is believed that teeth take up their position within muscle balance, expansion cannot be the commencing phase of all treatment nor the panacea for all abnormalities.

Appliances

The actual design of appliances used cannot be gone into without diagrams and slides. But in the making of removable appliances, I always think they should be as rigid as possible, and yet very easy to insert. Plates which flop down when the child opens his mouth are not much good: springs which have to be carefully pushed into place will just as easily get pushed into the wrong position. This, therefore, means that not too much should be attempted at once, so that appliances may be as simple as possible. I am also very much in favour of night time only appliances. Certain tooth movements, of course—noticeably pushing an incisor over the bite—often demand that the bite should be held open continuously and thus the plate must be worn all the time. But for most other cases, excellent results are obtained by appliances worn only at night time, and as the period of retention is generally much shorter, the sum total of time is not much greater. Appliances worn at night only are certainly more hygienic and little, if any, gingival irritation is caused. They also do not become food traps and the possible initial cause of caries is eliminated. For these two reasons alone I think they should be strongly advocated. Also I believe that one gets much greater co-operation from the patients and a more definite routine is established. I have recently been trying to ascertain how often appliances supposed to be worn continuously are actually in the mouth. One hears the revealing phrase "Of course, I can't eat in it." If that means taking it out for school dinners, it obviously also means that they are not put back for the rest of the afternoon. The plate may

be left at school one evening—and so one gets a picture of spasmodic wearing of the appliance even with the best wish to co-operate. I am certain that the routine of night only becomes much more regular and therefore tooth movement itself is regular. Pathologically, this is said to be beneficial; and certainly the results obtained are excellent and just as good as plates worn continuously.

Thinking of night time only appliances leads me to the last method of treatment I wish to discuss, and that very briefly. I am, of course, referring to the Norwegian or Andresen appliance¹¹. Like all other appliances it has its limitations, but in selected cases it can achieve most excellent results. Perhaps the best response is obtained from those types of malocclusion which present a maxillary overjet—or superior protrusion—and when all else appears normal. In other words, the straightforward Class II, Division I, cases. Quite often extractions will not be necessary and with the minimum expenditure of time in the surgery the results are good. Various springs can be added to the monobloc for individual tooth movement and a variation has been adapted for Class III cases. But if, in the school clinic, only Class II, Division I, cases are treated by this technique, we have gone a long way in finding a simple yet effective line of treatment. One or two points should, however, be borne in mind. First, the Andresen appliance is a form of intermaxillary traction and should not be used when such traction is contra-indicated. The recording of the bite is most important. As the appliance is muscle activated, the bite must be opened beyond the normal opening of the freeway space, otherwise muscle activation will not occur; likewise, the mandible must be brought well forward so that the muscle pull will be exerted to correct the position of the mandible and so transmit those forces throughout the whole arches to stimulate the movement of the teeth. For this, the appliance must be correctly trimmed to achieve the movements desired and the trimming checked at each visit. And finally, if no response is noticeable in six to nine months, then further more definite and possibly more radical treatment must be considered.

In conclusion, I should like once again to stress that even with the innumerable number of orthodontic cases seen in the school clinics, there is really no short cut to treatment. Each case must be diagnosed independently and the plan of treatment worked out. For those who wish to do a certain amount of orthodontic treatment themselves, the specialist should always be ready to help diagnose, to advise on treatment and even to help in the design of appliances. Only in that way can we begin to tackle the enormous problem which these thousands of cases present, and only with the real spirit of co-operation between the school dental officer and the specialist shall we begin to see some results for our labours.

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Co-operation between P.H.S., G.P.s and Hospitals.

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required immediately on discharge or for children who might need special educational treatment to fit their disabilities. In the latter case, the S.M.O. had to certify the need. Information passed through almoners was not sufficient.

The Conference agreed that every effort must be made by all concerned to achieve full co-operation. A full report will be submitted in due course to the Councils of the B.M.A. and the Society.

CO-OPERATION BETWEEN PUBLIC HEALTH SERVICE, GENERAL PRACTITIONERS AND HOSPITALS

A conference of representatives of the Public Health, General Medical Services, Central Consultants and Specialists and Central Ethical Committees of the British Medical Association and of the Society of Medical Officers of Health was held at B.M.A. House on May 7th. Dr. J. G. Thwaites, Chairman, Central Ethical Committee, B.M.A., was voted to the chair.

The Society was represented by Drs. J. M. Gibson (Chairman of Council), Miriam Florentin and A. A. E. Newth, and the Executive Secretary, and the Public Health Committee, B.M.A., by Drs. Kenneth Cowan (acting Chairman), Doris Craigmile and J. A. Stirling.

Reference of School Children for Special Investigation or Treatment.—The Chairman recalled that this meeting was a sequel to that of January, 1950, when representatives of the Association and the Society agreed a formula regarding the reference by the S.M.O. of children of school age for special investigation or treatment only after the child's general practitioner had been given an opportunity of expressing an opinion. The Councils of both bodies had accepted this and it had been promulgated for a 12-months trial period in January, 1951. This present meeting was to consider the results and any desirable amendments.

Dr. Gibson said that the arrangements suggested, or very similar arrangements, had been put into operation by the majority of School Medical Officers and had worked satisfactorily. The Society would favour their continuance.

The Executive Secretary added that the only fairly general suggestion for amendment was that for reciprocity, i.e., that a general practitioner sending a school child for special investigation or treatment should inform the S.M.O. Dr. Gibson said that it would probably be sufficient if the S.M.O. received a copy of the report from the consultant or hospital but this depended on the hospital service sending information to both parties concerned, if the parents had no objection.

Dr. Frank Gray (G.M.S. Committee) pointed to the statutory responsibilities of both G.P. and S.M.O. and to the national need for economy as a reason for co-operation with the least possible overlap. As Secretary of the London Local Medical Committee he had received no information of ineffective working of this scheme, which was a considerable tribute to it. Personal contacts between the doctors concerned were the best means of avoiding differences of opinion.

Dr. Newth said it would be helpful if the G.P. could let the S.M.O. know about the later history of his cases, though he realised that the G.P. was short of clerical aid.

Dr. W. Woolley (G.M.S. Committee) said that in his own area the scheme was working and his only complaint was that he had some difficulty in tracking down the children about whom the S.M.O. wrote to him; it would help if the S.M.O. would put the home address of the child on his letter notifying the G.P. He thought also that an explanation of the statutory duties of the S.M.O. would be enlightening to G.P.s.

The Chairman said that a paraphrase of the relevant sections of the Education Act and regulations would be incorporated in the full report presented to both Councils.

Dr. Florentin drew attention to the carbon-backed report forms in use in her area to save making several copies of reports; this might help G.P.s who were without clerical aid.

There was general agreement about the importance of more personal contacts between G.P.s and S.M.O.s.

In reply to a question whether the exchange of information was also applicable to children under school age, it was agreed that in practice most M.O.H.s were following a similar procedure for under fives as for older children.

The promulgation of information to G.P.s about all services available through local health authorities by regular bulletins was also felt to be desirable.

Transmission of Information from Hospitals to Health Departments.—The other matter discussed was the above, as advised by Ministry of Health Circular R.H.B. (50) 22, etc., covering information on infectious diseases (including tuberculosis), adult patients requiring after-care on discharge and children discharged from hospital.

Dr. A. A. Cunningham (C.C. & S. Committee) argued against any hide-bound scheme at the present time. Hospital clerical resources were so restricted that it would be impossible to send to the M.O.H. or S.M.O. the same information as was sent to the G.P.

Dr. Cowan strongly deprecated the suggestion that any undue burden was entailed on the hospital by the need to make an extra carbon copy of the letter to the G.P. Consultants must realise that it was highly important for the health department to have this information, especially for adults where after-care might be

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BOOK REVIEWS

The Educability of Cerebral Palsied Children. By M. I. DUNSDON. (Pp. 163. Price 21s.) London: Newnes Educational Publishing Co., Ltd. 1952.

This is a book which should be read by all who are concerned with cerebral palsied children. It will be particularly valuable to school medical officers who have to decide what can be done about their education. We have been urged recently to do more for their children and may have been led to take a somewhat optimistic view of their possibilities. Some of those whom we have written off as hopelessly ineducable may seem to be crying out to us to review their cases in the light of modern knowledge so that we may give them another chance, and as we examine and re-examine the less severe cases we may wonder whether we are doing all that is possible to help them to "free themselves from the shackles of their handicap." (Earl Carlson.)

In a foreword, Mr. Tomlinson, Minister of Education in the late Government, explains that in 1945 the Advisory Committee on Handicapped Children advised his predecessor to go into this question, and as a result the National Foundation for Educational Research in England and Wales entrusted Miss Dunsdon with the task. She drew upon information supplied by the British Council for the Welfare of Spastics, by the Ministry of Education, by certain L.E.A.s and by special schools for cerebral palsy cases. The total number of children included in the research was just over 3,700, of whom 916 were individually assessed by Miss Dunsdon, special attention being given to 468 who were candidates for a special school and to 38 or so who were actually in attendance at such a school.

After describing the main types of cerebral palsy and their incidence, the book goes on to deal with intellectual development of the children, and then with verbal ability and speech development, sensory defects, emotional stability and so forth, factors which determine the educability. The chapter on appreciation of spatial concepts is particularly interesting. Chapters on scholastic attainments in relation to disability and educational progress are followed by the selection of children for special schools and the book concludes with planning educational care. An appendix deals with the aetiology of the condition.

Miss Dunsdon's findings will be more comforting to the school medical officer who may have been pessimistic about his own efforts on behalf of spastics than to the parent who feels optimistic about her palsied child.

It seems that the ascertainment of cerebral palsy cases in this country is satisfactory—"very few cerebral palsied children of school age are unknown to L.E.A.s." Bearing in mind the recent suggestion that we might look to America to improve our school health service, the school medical officer will be gratified to read that "many handicapped children may exist there" (in many American states) "unknown, undiagnosed and without any facilities for treatment or special school education."

Miss Dunsdon claims that the ordinary tests of intelligence, such as the Terman Merrill, are applicable to these cases, although of course a good deal of special consideration has to be given in applying them. She does not say whether she agreed with the I.Q.s supplied by S.M.O.s, nor whether there was any improvement in the I.Q.s of individual children after they had been for a period in special schools, points on which many would have liked further information. She refutes the suggestion that a normal scatter of intelligence is to be found among the athetoids, although she acknowledges that the negligible number with superior potential capacity are to be found among this group. On the whole the greater the physical handicap the greater will be the intellectual backwardness.

The number of children capable of benefiting from education in special cerebral palsy schools is limited. Children with I.Q.s below 85 make little progress and should not be sent to them. It is remarked that only 17.7% of candidates for such schools were above this level. Miss Dunsdon suggests that during early school life the social and physical aspects of training should receive most attention. Those children who by 9 or 10 years of age have made sufficiently good progress could then be transferred to the special schools for cerebral palsy cases. For others, much formal education is largely a waste of time, and should be replaced by a scheme of "education for living."

No doubt many of Miss Dunsdon's contentions will be criticised, but she presents her facts fairly (although not always clearly) and she argues her case well. The book is free from psychological jargon, but it is not easy reading. Some of the medical facts need polishing.

A guinea seems a high price to pay for so small a book, but it is well worth it, for it presents aspects of the problem of the cerebral child which have not been accessible to us before, and it offers suggestions for dealing with the cases which are not

impossible. Miss Dunsdon, with her experience in child guidance work and with spastics, is particularly well fitted to deal with the subject and has done so most ably.

Causes and Prevention of Tuberculosis. By BRUCE R. CLARKE, M.D. (Pp. 296. Price 32s. 6d.) Edinburgh: E. & S. Livingstone, Ltd. 1952.

In no other disease have the events of the last 10 years caused so great a change in outlook as in the field of tuberculosis. Attention has been mainly given to the advances in treatment, for these have been spectacular and may yet be even more so. Chemotherapy and surgery have brought within the scope of successful treatment many tuberculous conditions whose prognosis was considered not so long ago to be hopeless. But these measures can only be of use to those whose disease is discovered at a stage when they can be applied, and these are still the minority.

If the eradication of tuberculosis is to be accomplished, more emphasis must be laid on the epidemiological and preventive aspects. Dr. Clarke's book excellently presents what is involved. The extent of tuberculous infection and frank tuberculosis in the community is considered in the light of tuberculin surveys, mass radiography and other case-finding measures. Primary infection and its immediate effects are clearly described, together with measures to prevent or minimise the risk of infection, without which disease cannot develop. Until such time as the infection rate is very much lower than at present, those conditions of living which may influence infection will continue to be of great importance. Dr. Clarke deals adequately with such things as overcrowding, malnutrition, habits of work, leisure, social customs and other relevant matters.

The chapter on infections by the bovine type of bacillus is an excellent reminder of the unnecessary mortality and suffering from this cause. Although statistically small in comparison with infection by the human strain, the presence of even this number of cases might cause doubt of the whole-heartedness of our attempts to stamp out the disease. He discusses in detail the preventive measures applicable to those who have not yet had their primary infection and those whose infection has been accomplished without mishap. In the management of the clinically ill the places of home and hospital treatment, education and segregation are considered. Therapeutics are mentioned only as a contribution to preventing the spread of infection in the population. A critical appreciation and favourable opinion of B.C.G. vaccination form another useful chapter.

After consideration of all the facts a cautiously optimistic view of the future of tuberculosis control is taken. We quote from page 156: "Provision of an adequate food supply is far the most important of living conditions in relation to tuberculosis, because the almost universal latent infection will manifest itself as disease in proportion to the severity of malnutrition."

"Other living conditions are important either as contributory causes of malnutrition or as factors which predispose to infection. Improvement in living conditions will aid the eradication of tuberculosis only in so far as such improvement conduces to the control of infection. The scientific control of infection, supported by informed public opinion, is the special environmental condition which alone promises the eradication of the disease from the community. The raising of the level of resistance by non-specific measures or by vaccination will be most effective in societies which strive to reduce opportunities of infection to a minimum, for no known means of raising resistance promises complete protection."

The Rhesus Danger. Its Medical, Moral and Legal Aspects. By R. N. C. McCURDY, M.B., CH.B., D.P.H. (Pp. 138. Price 5s. net.) London: Heinemann Medical Books, Ltd. 1951.

This is a comprehensive review of the subject, for doctor and layman, written clearly and simply. The significance of Rhesus incompatibility and the problems arising from it are shown in the introduction. A review of the medical background follows, starting with a description of Mendelian inheritance, blood groups, transfusions and antigen-antibody reactions. There is then an account of the discovery of Rhesus factors and a survey of all that is now known about them, including the diagnosis and methods of treatment of the affected baby. The second part of the book gives the details of all the possible ways of dealing with the problem for a husband and wife who are faced with the tragic situation of Rhesus incompatibility.

Dr. McCurdy takes a wide view of the Rhesus factor and discusses it in connection with such controversial facets as abortion, artificial insemination, Rhesus incompatibility as a ground for divorce and population problems.

The interest of the book is increased by the historical approach to each subject and the excellent account of the relevant legislation. Numerical evidence from various sources, such as the Registrar-General's Returns and the publications of PEP, is freely used.

OBITUARY

JOHN HOWARD-JONES, T.D., M.D., C.M., D.S.C. (P.H.) EDIN.
President of the Society, Session 1928-29

The death on April 12th, in his 87th year, of Dr. J. Howard-Jones, for 33 years Medical Officer of Health and port medical officer for the county borough of Newport, Monmouthshire, has followed closely that of another distinguished M.O.H. and Past-President of the Society, Dr. Killick Millard. At its meeting on May 2nd the Council stood in silence in honour of the memory of these two worthy representatives of the last generation of Medical Officers of Health, whose main work was carried out during perhaps the period of greatest advance in preventive medicine in this country.

John Howard-Jones was born at Newcastle Emlyn in 1866, and was one of a family of 14. He went from the Normal College, Swansea, to Edinburgh, where he graduated in medicine in 1890 and took the B.Sc. in 1892, proceeding to the D.Sc. in 1893 and the M.D. in 1899. His first medical post, after a period as assistant demonstrator of pathology at Edinburgh, was with the Dowlais Iron Company. He was appointed M.O.H. of Newport in 1899, which office he was to hold for 33 years until his retirement in 1932. That town is one of the smaller county boroughs where the M.O.H. has the advantage of retaining personal contact with all public health activities, including, in those days, superintendence of all infectious diseases hospital. Those who remember his service on the Council of the Society will recall how catholic was his knowledge of all public health developments. But his particular memorial is the improved environment of the British merchant seamen, for which he was the outstanding pioneer spokesman. For many years any question on port health and on the hygiene of merchant ships, particularly of crews' spaces, was almost automatically referred to Dr. Howard-Jones, and he must have felt much satisfaction in his latter years at noting the advances in British standards, so largely attributed to his personal advocacy. But he was a man of all-round vision, witness his Presidential Address to the Society in October, 1928, for which his theme was "The Role of the General Practitioner and Specialist in Preventive Medicine," a title with a very modern ring to-day. That address might have been read with profit by the architects of the National Health Service.

Dr. Howard-Jones did not regard retirement as an excuse for inactivity. He voyaged as a ship's surgeon and, during World War II, relieved a younger colleague as medical officer to the Newport Shipping Federation.

We extend our deepest sympathy in their loss to his widow, son and daughters.

SOCIETY OF MEDICAL OFFICERS OF HEALTH

NOTICES

MATERNITY AND CHILD WELFARE GROUP

Post-Graduate Refresher Course, London, Saturday
and Sunday, June 28th and 29th, 1952

Programme

Saturday, June 28th

- 9.30 a.m. The Middlesex Hospital, Mortimer Street, London, W.1. Lecture by Mr. Ian Jackson, Obstetrician. Demonstration of clinical cases.
- 2.15 p.m. Lecture Theatre, London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, W.C.1.
- (1) Marriage Guidance: Mrs. Marjorie Hume, Chairman of the London Marriage Guidance Council.
 - (2) Sub-fertility: Dr. Mary Macaulay, Senior Medical Officer, Family Planning Association Clinic, Liverpool.
 - (3) Birth Control: Dr. Helena Wright, Medical Officer, Birth Control Clinic, Telford Road. Discussion.

Sunday, June 29th

- 10.15 a.m. The Small Hall, St. Pancras Town Hall, London, N.W.1. Dr. J. W. B. Douglas, Director of the National Survey of the Health and Development of Children, on "The Health and Growth of Premature Children during the First Four Years of Life." Discussion.

Tables have been reserved for lunch for 50 members in the restaurant of Heal and Son, 193/199, Tottenham Court Road, on Saturday, June 28th. The charge is 6s. 9d. per head, including coffee.

The Chief Medical Officer of the Ministry of Health has been informed of the details of the Course, and states that a Local Health Authority sending to this Course any of their medical officers might properly include expenditure incurred in this way in their grant claim, subject to the usual conditions.

The registration fee for the Course is £1 1s. 0d.

Will those wishing to attend the Course obtain from the Office an application form and send it, together with the registration fee, to Dr. Kathleen M. Hart, 26, Langside Crescent, Southgate, London, N.14. Applications should be received not later than June 21st. Should the applications exceed the available accommodation they will be accepted in the order in which they are received.

Group Annual Dinner

The Annual Dinner of the Group will be held on Friday, June 27th, at Simpson's-in-the-Strand, London, W.C.2, at 7 for 7.30 p.m., following the Annual General Meeting. Tickets, 17s. 6d. each, may be obtained from Miss Paton, Society of Medical Officers of Health, Tavistock House South, Tavistock Square, London, W.C.1. Cheques should be made payable to Dr. E. V. Saunders-Jacobs. Informal dress.

SCHOOL HEALTH SERVICE GROUP

Annual General Meeting

The Annual General Meeting of the Group will be held in Room 310 of the London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, London, W.C.1, on Friday, June 20th, at 5 p.m.

The speaker will be J. Lumsden, Esq., M.A., of the Special Services Branch, Ministry of Education, who will give an address on "Special Educational Treatment with particular reference to the Educationally Sub-Normal."

Preliminary Notice of Refresher Course for Medical Officers engaged in the School Health Service

The School Health Service Group is arranging a Refresher Course particularly designed for Medical Officers newly engaged for work in the School Health Service. The course is to be held during the week September 15th to 19th at the London School of Hygiene and Tropical Medicine. The fee for the Course will be £3 3s. and residential accommodation can be provided for 40 members at approximately 15s. per day. The number of available places for the Course will be limited to 65 members. Members who would like to receive further details of the Course please notify the Assistant Secretary of the Society.

Application has been made to the Ministry of Education so that the necessary expenses of candidates attending the Course can be reimbursed by Local Education Authorities.

REPORTS

ORDINARY MEETING

An Ordinary Meeting of the Society was held in the Council Room of the B.M.A., Tavistock Square, London, W.C.1, on May 1st, 1952.

The chair was taken by the President (Dr. W. G. Clark) and there were also present some 25 members.

Minutes.—The minutes of the Ordinary Meeting of the Society held on February 1st, 1952, were confirmed and signed.

Election of the President, 1952-53.—The Chairman of Council reported that under Article 17 the name selected by the Council for nomination as President of the Society was that of Dr. Andrew Topping, Dean of the London School of Hygiene and Tropical Medicine. The meeting unanimously elected Dr. Topping, who briefly gave thanks for the honour given to him.

Life Members.—The following were elected fully-paid Life Members of the Society on the recommendation of their Branches and of the Council:—

East Midland Branch.—Dr. William Barr (formerly M.O.H., Rotherham C.B.), joined the Society 1911; Surg.-Capt. A. B. Clark, R.N. (ret.) (formerly M.O.H., Kirby-in-Ashfield U.D., and A.M.O.H., Notts), joined the Society 1920.

Election.—The following candidates having been duly proposed and seconded were elected to membership:—

Fellows.—Allen, Katharine Elizabeth Mary, M.A. (CANTAB.), M.R.C.S., L.R.C.P.; Baker, Hazel B., M.D., B.S. (LOND.), M.R.C.S., L.R.C.P.; Barnfield, Rotha Holroyd, M.R.C.S., L.R.C.P. (LOND.); Black, Agnes Wilhelmina Elizabeth, M.B., B.Ch. (BELF.), B.A.O., D.P.H.; Blyth, Robert Allen, M.B., Ch.B. (LIV.), M.R.C.S., L.R.C.P.;

Boyd, Joan, M.B., Ch.B. (BRIST.); Brodigan, Margaret, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H. (LOND.); Dobson, R.C.O.G.; Buchanan, James Andrew, M.B., Ch.B. (EDIN.), D.P.H.; Cairns, Kathleen Mary, M.B., B.S. (LOND.), M.R.C.S., L.R.C.P.; Connelly, William Joseph, L.R.C.P., L.R.C.S. (EDIN.), D.P.H. (GLAS.); Cook, Norman John, M.B., Ch.B. (BRIST.), D.C.H.; Cooper, Ronald Sales, M.B., B.S. (LOND.); Crawshaw, Donald George, M.B., Ch.B. (MANCH.), M.R.C.S., L.R.C.P., D.C.H., D.P.H.; Croll, John MacArthur, M.B., Ch.B. (ABERD.), D.P.H.; Dare, Marjorie T., M.B., Ch.B. (MANCH.); de Boer, Henry, M.R.C.S., L.R.C.P., D.P.H. (CANTAB.), D.T.M. & H. (LOND.); Demaine, Barbara Reid Alexander, M.B., Ch.B. (ABERD.), D.P.H.; Dennett, Evelyn Frances Patricia, M.B., B.S. (LOND.), M.R.C.S., L.R.C.P.; Dupré, Peter, M.A., M.R.C.S., L.R.C.P., D.P.H.; Fawcett, Edward Leonard, M.B.E., M.R.C.S., L.R.C.P., D.P.H.; Forth, Dorothy Mary Margaret, M.B., Ch.B. (ABERD.); Fraser, C. Jean, M.B., Ch.B. (BRIST.), D.P.H.; Fraser, Sheila E., M.B., Ch.B. (BRIST.); Galloway, Thomas McLaren, M.B., Ch.B., M.R.C.P. (EDIN.), D.P.H., D.R.P.H.; Gilmour, Margaret Rodger, M.B., Ch.B. (GLASG.), D.P.H.; Goodman, Neville Marriott, M.A., M.D. (CANTAB.), M.B., B.Ch., F.R.C.P., M.R.C.S., D.P.H.; Gray, Ethel E. M., M.B., Ch.B. (ABERD.), D.P.H.; Harding, Kathleen Mary, M.B., B.S. (LOND.), M.R.C.S., L.R.C.P., D.P.H.; Hare, Margaret Caroline, M.B., B.Ch.R., M.R.C.S., L.R.C.P.; Hegarty, Mary Elizabeth, M.B., B.Ch., B.A.O. (BELF.); Hendrie, Margaret, M.D. (LOND.), D.P.H., D.C.H., D.O.Bst.R.C.O.G.; Hood, Helen Reid Thomson, M.B., Ch.B. (EDIN.), D.P.H.; Hughes, Richard James, M.B.E.; Humphries, Barrymore, M.B., Ch.B. (SHEFF.), D.O.Bst.R.C.O.G.; Lambert, Ellis Vivian, M.B., B.S. (LOND.), M.R.C.S., L.R.C.P.; Lucey, Elizabeth, M.B., B.Ch., D.P.H., D.C.H. & M.; McCabe, Elizabeth Mary Isabella, M.B., Ch.B. (ABERD.); MacLachlan, James, M.B., Ch.B. (GLASG.), D.P.H.; Main, Jessie K. M., L.R.C.P., L.R.C.S. (EDIN.), D.P.H.; Mautner, Francis, M.D. (PRAGUE); Maxton, James, M.B., Ch.B. (GLASG.), D.P.H.; Millar, William Semple, Major R.A.M.C., L.R.C.P., L.R.C.S. (EDIN.), L.R.F.P. & S. (GLASG.); Miller, Raymond, M.B., B.Ch. (BELF.), D.P.H.; Mowat, Isobel S., M.B., Ch.B. (EDIN.), D.P.H.; Naish, Nora, M.B., B.S. (LOND.), D.C.H.; Nithsdale, Jean Macfarlane, M.B., Ch.B. (GLASG.), D.P.H.; Paterson, Elfride Katherine Jessie, L.R.C.P. (LOND.), M.R.C.S., C.P.H.; Pirrie, Alexander Laurensen, M.B., Ch.B. (GLASG.); Quinet, Margaret D. E., M.B., Ch.B. (BIRM.), D.O.Bst.R.C.O.G.; Reid, John Alastair Wright, M.B., Ch.B. (GLASG.), D.P.H.; Richards, Arthur Hubert Mordaunt, B.M., B.Ch. (OXON.), M.R.C.S., L.R.C.P., D.P.H.; Richards, Mary Elizabeth, B.Sc., M.B., B.Ch. (CARDIFF), M.R.C.O.G.; Rosser, Deulwyn, M.R.C.S., L.R.C.P. (LOND.); Rutherford, Hubert Watson, M.B., Ch.B. (ABERD.), D.P.H.; Seacome, Mary, B.M., B.Ch. (OXON.); Shiel, John Brotherton, M.B., Ch.B. (GLASG.), D.P.H.; Steele, George Alfred, M.B., Ch.B. (MANCH.), M.R.C.S., L.R.C.P., D.P.H.; Thomson, James Gibb, Lt.-Col., M.B., Ch.B. (GLASG.); Walters, John Stewart, M.B., Ch.B. (GLASG.), D.P.H.; Watson, Alexandra Costello, M.B., Ch.B. (GLASG.), D.T.M.; Williamson, Margaret L., M.B., Ch.B. (GLASG.), D.P.H.; Wilson, William, M.B., B.Ch., B.A.O. (BELF.), D.P.H.; Young, William Arthur, D.M. (OXON.), M.R.C.S., D.T.M. & H., D.P.H.

Associates.—Macdonald, M.B., Ch.B. (GLASG.), D.P.H.; Millett, Arthur Hugh, L.D.S., R.C.S. (ENG.).

Several nominations for the next election were reported.

The meeting terminated at 1.30 p.m.

COUNCIL MEETING

A meeting of the Council of the Society was held in the Council Room of the B.M.A. on Friday, May 2nd, 1952, at 10 a.m.

The Chairman (Dr. J. M. Gibson) presided, and there were also present the President (Dr. W. G. Clark), Drs. W. Alcock, F. A. Belam, W. H. Bradley, Prof. C. Fraser Brockington, Drs. F. G. Brown, G. Buchan, J. S. G. Burnett, H. D. Chalke, T. M. Clayton, H. K. Cowan, C. K. Cullen, F. M. Day, R. H. G. H. Denham, James Fenton, Miriam Florentin, F. Gray, Kathleen M. Hart, A. S. Hebblethwaite, C. E. Herington, J. A. Ireland, R. H. H. Jolly, J. B. McKinney, J. Maddison, J. B. Morgan, A. A. E. Newth, R. H. Parry, Hugh Paul, R. C. M. Pearson, T. Ruddock-West, Mr. J. F. A. Smyth, L.D.S., Dr. J. A. Stirling, Mr. A. Gordon Taylor, L.D.S., Drs. Andrew Topping, Nora Wattie, C. Leonard Williams, H. C. Maurice Williams and Prof. G. S. Wilson.

137. **Apologies for Absence** were received from: Dr. C. Metcalfe Brown, Sir John Charles, Drs. H. M. Cohen, Catherine B. Crane, Sir Allen Daley, Drs. Maurice Mitman, G. H. Pringle, A. G. Reekie, J. Riddell, G. McKim Thomas, F. R. Waldron, E. J. Gordon Wallace, W. S. Walton, Ann Mower White and John Yule.

138. **Death of Past-Presidents of the Society.**—Members stood in silence as a token of respect on being informed of the

deaths of Drs. C. Killick Millard and J. Howard-Jones, Past-Presidents of the Society.

139. **Honour to Members of the Society.**—The Chairman, on behalf of the Council, congratulated Prof. R. H. Parry on his appointment as Honorary Physician to Her Majesty the Queen, and also congratulated other members of the Society who had been similarly honoured, namely, Drs. S. Barron, Arthur Massey and H. J. Rae.

140. **Minutes.**—The Minutes of the meeting held on February 1st (Public Health, March, pages 97-100) were confirmed and signed.

141. **Functions of the M.O.H.**—Authority was given for the printing of the Society's memorandum on the Functions of the M.O.H. to be put in hand at an approximate cost of £175.

142. **Printing (Min. 90).**—It was reported that the net cost of the recent issue of the Roll of Members of the Society was £300. On the suggestion of the Honorary Treasurer it was resolved that in view of its very high cost publication be suspended until otherwise determined.

143. **Membership of Council (Min. 102).**—It was resolved that Branches and Groups be asked voluntarily to reduce, for the time being, their number of representatives on the Council.

144. **Ministry of Education—Medical Inspection Returns of Infestation (Min. 103).**—It was reported that the request for information in annual medical inspection returns of infestation, to be submitted separately for boys and girls, was made by a County M.O.H. and not the Ministry of Education. The Ministry had stated that it would be sufficient for School M.O.s to take the total number of children on the school registers in January as the total number of children examined by the nurses, thus minimising the amount of clerical work necessary to provide statistics for the returns.

145. **Representation of the Society (Min. 106).**—It was reported that Dr. F. T. Madge (Kendal) had kindly offered to represent the Society at the Annual Conference of the National Dairymen's Association in the place of Dr. J. S. G. Burnett, who was unable to be present.

146. **Officers of the Society for the Session 1952-53.**—

(a) **President.**—It was reported that only one nomination had been received for the Presidency of the Society for the session 1952-53, namely, Dr. Andrew Topping (Metropolitan Branch). This nomination had received the unanimous support of the other Branches and Groups of the Society and accordingly it was unanimously resolved that the name of Dr. Andrew Topping, F.R.C.P., Dean of the London School of Hygiene and Tropical Medicine, be submitted for election by the Ordinary Meeting to follow. Dr. Topping thanked the Council for the submission of his name. He was congratulated on behalf of the members by Dr. James Fenton.

(b) **Chairman of Council.**—Dr. J. M. Gibson.

(c) **Three Vice-Presidents.**—Prof. R. H. Parry, Dr. H. C. Maurice Williams and Dr. W. G. Clark.

(d) **Honorary Treasurer.**—Dr. James Fenton. **Honorary Deputy Treasurer.**—Dr. C. E. Herington.

(e) **Honorary Solicitors.**—Messrs. Neish, Howell and Haldane.

147. **Report of the General Purposes Committee.**—Dr. H. K. Cowan presented the report of the General Purposes Committee held on Friday, March 7th, 1952. (Appendix A.)

Min. 110. **Illness of Dr. C. Metcalfe Brown.**—Members learned with pleasure that Dr. Metcalfe Brown's condition had much improved and that he was shortly to be discharged from hospital. The Executive Secretary was requested to send a letter of congratulation to Dr. Metcalfe Brown.

Min. 113. **Whitley Medical Functional Council.**—(a) It was reported that the Staff Side of Whitley Committee C was shortly to hold a meeting to review the whole question of salaries of medical officers in the Public Health Service with a view to the preparation of a new claim for salary improvements.

(b) Information given on the implementation of the two Awards of the Industrial Court showed a much improved condition.

(c) **Dual Appointments.**—It was reported that a new formula for the settlement of this question was to be considered by the Public Health Committee of the B.M.A. which would safeguard the principles already determined and which it was hoped would be acceptable to Local Authorities and to the Ministries concerned.

Min. 114. **Durham County Council—Closed Shop.**—Further information was given on action being taken by the Joint Emergency Committee to secure the termination of the closed shop policy of the Durham County Council. It was also reported that the British Medical Guild was continuing to give assistance to members who were at a considerable financial disadvantage by loyally supporting the policy of the Society and the B.M.A.

Min. 115. Mixed Appointments in the Metropolitan Area.—It was reported that the legal opinion to be presented to the Public Health Committee of the B.M.A. at a subsequent meeting would advise that the condition of service which appeared to effect the security of tenure of officers taking mixed appointments in the Metropolitan area was ineffective and contrary to the Local Government Act.

Min. 116. Leprosy.—A letter dated April 21st from a Medical Officer of Health in the London area gave an account of a further case of difficulty which had arisen as a result of the policy of the Ministry of Health regarding the notification of leprosy.

Min. 118. Medical Examination of School Teachers.—Letters dated February 8th and 12th from the Ministry of Education were reported thanking the Society for the observations on the revised procedure for medical examination of entrants to training colleges and the teaching profession and detailing the amendments which had been made to the draft circular as a result of those observations.

Min. 120. Sanitary Inspectors' Working Party.—Considerable discussion took place on the draft memorandum of evidence for presentation to the Working Party set up by the Ministry of Health to consider the training, qualifications and conditions of service of Sanitary Inspectors. The document was finally approved in the form appended (Appendix B).

Min. 122. Medical Manpower in War-time.—It was reported that the necessary action was being taken to prepare a list of nominations by Branches of the Society for appointment to Area Recruitment Committees to form the basis of consultation between representatives of the Society and the Local Authority Associations.

Min. 127. Education Act, 1944.—A further letter dated March 10th from the Ministry of Education was reported giving details of further proposed amendments to the Act. The letter was referred to the School Health Service Group and the Dental Officers' Group for comment.

Min. 129. Slaughtering of Animals.—A letter dated March 28th from the A.M.C. was reported stating that the Association agreed with the view that all meat intended for human consumption, whether for sale or not, should be made subject to special inspection by appropriate officers of Local Authorities. A letter dated April 19th from the Ministry of Food was received setting out the Ministry's point of view and its reasons for its regretful refusal to make amending legislation as recommended by the Society and the A.M.C.

Min. 130. Provincial Meeting of the Council.—The President gave details of the proposed programme of events during the week-end July 18th-19th.

Subject to the comments and additional information contained in the foregoing the Minutes of the General Purposes Committee were accepted and the recommendations contained therein adopted.

148. Industrial Health Service.—It was reported that an invitation had been received from the B.M.A. for the Society to appoint representatives to discuss with a special sub-committee of its Occupational Health Committee the comments of the Society and the B.M.A. on the report of the Dale Committee on Occupational Health Services. In consultation with the Chairman of Council, the Chairman, the President, Prof. C. Fraser Brockington and Drs. J. S. G. Burnett, Stuart Laidlaw, J. B. S. Morgan, A. A. E. Newth and H. C. Maurice Williams were asked to represent the Society at the meeting which took place on April 30th. The President gave a short résumé of the proceedings at the meeting and mentioned in particular the question of the possible integration of the D.I.H. and the D.P.H. This question would be considered by the Sub-committee of the Society which was considering the future of the M.O.H. and his training with particular reference to the content of the course for the D.P.H.

149. D.P.H. Committee (Min. 10/52).—A verbal report of the discussions which took place at the meeting of the D.P.H. Committee held on May 1st was received.

150. Programme for the Session 1952-53.—After hearing the report of the Executive Secretary it was agreed that the installation of the President of the Society for the next session should be held on Thursday, September 18th, and that the School Health Service Group be asked to include the event in the programme for the Refresher Course for M.O.s engaged in the School Health Service which was to be held from September 15th to 19th.

It was agreed further that the programme of meetings of the Council of the Society and its Committees should commence with a meeting of the full Council on October 24th and that the Annual Dinner of the Society be held on October 23rd at the Piccadilly Hotel.

151. Decentralisation (Min. 15/52).—It was reported that agreement had been reached at a meeting held at the Health Congress at Margate between representatives of the Council and of the County and County District Groups on a decentralisation policy. The recommendations were agreed and the document was adopted as the official policy of the Council (Appendix C).

152. Local Government Act, Section 111 (Min. 52/52).—Referred to the next meeting of the General Purposes Committee.

153. B.M.A. Membership Subscriptions.—It was reported that the B.M.A. was about to take the necessary steps to increase the rates of its membership subscriptions and that special consideration was to be given to certain sections of members. It was resolved that the Society approach the B.M.A. with a view to the introduction of a reduced rate of subscription applicable to salaried officers engaged solely in the Public Health Service.

154. Tuberculosis Regulations.—Ministry of Health Circular 6/52 enclosing copies of the new Tuberculosis Regulations was received together with a copy of Circular R.H.B. 52/39 which had been issued by the Ministry as a result of consultation with the Society on these regulations.

155. Rehabilitation of Tuberculous Persons.—Ministry of Health Circular 7/52 dealing with rehabilitation of tuberculous persons was received together with a letter from a County Borough M.O.H. drawing attention to certain aspects of the circular with which the Society would probably not be in agreement. Discussion of the matter was deferred pending consideration by the Public Health Committee of the B.M.A.

156. Co-operation of Hospital, Local Authority and G.P. Services.—The contents of Ministry of Health Circular 11/52 were noted.

157. Ministry of Education Circulars Nos. 248 and 249 and Administrative Memoranda Nos. 417 and 418 were received and referred to the School Health Service Group for consideration.

158. Psychiatry and the Law.—The attention of members was drawn to the report of the joint committee on Psychiatry and the Law which had been appointed by the B.M.A. and the Magistrates' Association and it was resolved that the B.M.A. be recommended to provide, within the constitution of the Committee, for a member of the Public Health Service to be co-opted to membership.

159. Royal College of Midwives.—It was decided to take no action on a letter dated March 6th from the Royal College of Midwives regarding co-opting of midwives to membership of health committees.

160. Institute of Public Administration.—The attention of members was drawn to the forthcoming issue of a study on Delegation of Powers by County Councils under the National Health Service and Education Acts.

161. Maternal Deaths.—A question raised by the West of England Branch was referred to the General Purposes Committee.

162. Sonne Dysentery Sub-committee.—It was decided to take no action on a letter dated March 24th from Dr. E. C. Downer requesting the Society to seek added representation on the Sonne Dysentery Sub-committee.

163. Smallpox Consultants.—The attention of members was drawn to the letter of the Chief Medical Officer, Ministry of Health, published in the *Medical Officer*, April 12th issue, page 148.

164. Superannuation.—It was reported that a letter had been received from the Ministry of Housing and Local Government and Planning requesting the Society to make comments on the proposals of that Ministry to extend the provisions of Part III of the National Health Service (Superannuation) Regulations to M.O.H.s of Metropolitan Boroughs, Non-County Boroughs and County Districts. In view of the fact that the observations had been requested by April 15th a letter was forwarded to the Ministry stating that the Society wished to express its pleasure at the measure proposed. This action was confirmed.

165. County Borough Group.—The following resolution of the County Borough Group was referred to the General Purposes Committee for consideration:—

"That the Council of the Society be asked to consider making an approach to the Ministry of Health requesting a review of the present arrangements which cause overlap of the services provided by Welfare Authorities and the Local Health Authorities in respect of the aged and handicapped classes."

166. Official Designation of Medical Officers.—Consideration of a recommendation of the M. & C.W. Group that an alteration be made in the designation of M.O.s employed in departments was referred to the D.P.H. Committee for consideration.

167. Notification of Infectious Diseases.—A recommendation from the Sheffield Region Pre-Liaison Committee regarding the notification of Infectious Diseases was referred for considera-

tion by the General Purposes Committee when it considered a document on infectious diseases and their notification generally.

108. Banking Account.—Following the appointment of Dr. C. E. E. Herington as Honorary Deputy Treasurer and the appointment of Mr. S. R. Bragg as Assistant Secretary it was resolved "that the Westminster Bank, Ltd., be and is hereby authorised to honour the signatures of the Honorary Treasurer or the Honorary Deputy Treasurer for the time being to all cheques, bills and other documents drawn or made payable with the Bank, and to any order to withdraw any or all Securities, Short Bills, or other property in the hands of the Bank, including Box or Boxes and their contents, and that the Bank be and is authorised and requested to act on the same signatures in arranging or granting credits or guarantees at home or abroad to or for the Society and under its responsibility. That the signatures of the Honorary Treasurer, the Honorary Deputy Treasurer, the Executive Secretary or the Assistant Secretary on behalf of the Society shall be sufficient for the endorsement of negotiable instruments paid in to the said account for collection or discounted or negotiated with the Bank. That the Petty Cash Account in the name of the Society to be credited at four weekly intervals with the sum of £100 from the main account, the account to be operated by the Executive Secretary, Mr. G. L. C. Ellison, or in his absence, by the Assistant Secretary."

109. Representation.—The following were elected:—
(a) *Cremation Society*.—Annual Conference, Margate, July 8th to 10th, one representative—Dr. G. L. Brocklehurst.

(b) *National Registration of Plumbers*.—Annual Meeting, London, June 6th, one representative—a local M.O.H.

(c) *Public Health Engineering Advisory Committee*.—One representative—Dr. J. Greenwood Wilson.

(d) *Central Council for Health Education*.—Two representatives—Dr. E. K. Macdonald and H. C. Maurice Williams.

(e) *British Council for the Welfare of Spastics*.—Two representatives, one each from the M. & C.W. and School Health Service Groups—Dr. Ann Mower White and Dr. A. A. E. Newth.

(f) *Sanitary Inspectors' Association*.—Annual Conference, Brighton, September 12th, one representative—the President.

170. Life Membership.—The following recommendations for Life Membership from the various Branches were confirmed for election at the next Ordinary Meeting of the Society:—

Home Counties Branch.—Dr. Rutherford Cramb, formerly M.O.H., Brighton C.B., joined the Society 1922.

North-Western Branch.—Dr. James Walker, formerly Deputy M.O.H., Preston C.B., joined the Society 1920.

Scottish Branch.—Dr. G. V. T. McMichael, formerly M.O.H., Paisley Burgh, joined the Society 1913.

There being no other business the meeting was declared closed at 1.25 p.m.

APPENDIX A

GENERAL PURPOSES COMMITTEE

The first meeting of the General Purposes Committee of the Society as reconstituted in accordance with the recommendations of the Officers of the Society was held on Friday, March 7th, 1952, at 10 a.m., in the Committee Room of the Society.

There were present the President (Dr. W. G. Clark), the Chairman of Council (Dr. J. M. Gibson), Drs. H. D. Chalke, H. K. Cowan, C. K. Cullen, F. M. Day, James Fenton, Miriam Florentin, Maurice Mitman, A. A. E. Newth, J. A. Stirling, and Mr. A. Gordon Taylor, L.O.S.; Dr. A. V. Kelynach (B.M.A.) was also present during the earlier part of the meeting.

108. Appointment of Chairman.—It was resolved that Dr. H. K. Cowan be elected Chairman of the Committee for the remainder of the session.

109. Apologies for absence were received from Drs. C. Metcalfe Brown and W. S. Walton.

110. Illness of Member.—Members were informed that Dr. C. Metcalfe Brown, who had been unwell for some time, had recently been admitted to hospital and was seriously ill. It was resolved that a letter of sympathy and encouragement be forwarded to Dr. Metcalfe Brown on behalf of the Committee.

111. Membership of the Committee.—The membership of the Committee, as determined by the Council, was reported formally.

112. Minutes.—The Minutes of the meeting of the Committee held on December 21st, 1951, (Public Health, March, pages 103-105) were confirmed and signed.

113. (Min. 47). Whitley Medical Functional Council.

(a) Dr. A. V. Kelynach, Assistant Secretary B.M.A., reported the present position regarding the implementation by Local Authorities of the two Awards of the Industrial Court.

(b) **Information Regarding Implementation.**—It was reported that the combined action of the B.M.A. and the Society had

resulted in further information regarding implementation being received from a number of Authorities. There were still some M.O.H.s who had not forwarded the information required and the Executive Secretary was asked to send to each Branch an up-to-date list of these Authorities.

(c) **Dual Appointments.**—Considerable discussion took place regarding the effects on Officers holding Dual Appointments of any agreement which was to be reached regarding the appropriate salary to be paid to Officers in each category. It was resolved to recommend that the representatives of the Public Health Service continue to press for single contracts with the major user and for payments to the individual officer at the appropriate rate for each appointment held.

(d) It was reported that in accordance with the instructions given at the last meeting of the Committee a letter had been addressed to the medical journal which had published an advertisement for a vacancy in the public health department of an authority which had not fully implemented the Awards of the Industrial Court. The Editor of the journal had replied stating that he did not agree with the views expressed in the letter. It was resolved that a further communication be addressed to the Editor stating that subsequent developments in the particular case at issue had shown the advantages to be obtained when all medical journals followed the B.M.A. policy and expressing the view that individual journals should not enter into correspondence direct with Authorities regarding advertisements for vacancies.

(e) **Welsh Branch.**—The following resolutions, passed at a meeting of the Welsh Branch held on February 8th, were received:—

1. The Welsh Branch of the Society of Medical Officers of Health wish to express their dissatisfaction of the award of the Industrial Court, particularly as it affects the remuneration of Assistant Medical Officers.

2. The majority opinion of the members of the Branch present at this meeting considers that the negotiating machinery was not satisfactory and in particular that Assistant Medical Officers were not, at that time, adequately represented.

3. It is considered by this Branch that, as in the past, additional qualifications such as the D.P.H., D.C.H., D.R.C.O.G., etc., and post graduate experience are essential qualifications for entry into the Public Health and that possession of these should be recognised in a future salary scale.

114. (Min. 48). Durham County Council—Closed Shop.—It was reported that following the decision of the Durham County Council to defer consideration of a recommendation that the requirements in the staff conditions of service which virtually upheld the closed shop principle be withdrawn a meeting of representatives of the Royal College of Midwives, Royal College of Nursing, British Dental Association, Engineers Guild and the B.M.A. had been held to discuss the matter. It had been agreed that the representatives should seek their Associations' approval to the setting up of a Joint Emergency Committee of the professions concerned to take action to secure the complete removal of any compulsion real or implied for members of the profession employed by the Durham County Council to be members of trade unions or professional organisations. It was resolved that the Chairman of Council (Dr. J. M. Gibson) be recommended for appointment by the B.M.A. as a member of the Joint Emergency Committee.

115. (Min. 49). Mixed Appointments in the Metropolitan Area.—It was reported that the Public Health Committee of the B.M.A. would be considering a legal opinion on the effects of the conditions of service for mixed appointments in the Metropolitan area on the security of tenure of the officers concerned at a meeting which would follow the present meeting.

116. (Min. 53). Leprosy.—A letter dated February 4th from the Chief M.O. Ministry of Health was received, informing the Society that the Ministry still did not see its way clear to amend the Regulations. It was reported that a joint deputation from the A.M.C. and the B.M.A. had been received by representatives of the Ministry and that their representations which were similar to those of the Society would have further consideration by the Ministry.

117. (Min. 66). Public Health (Infectious Diseases) Regulations.—A letter dated February 15th from the Chief M.O. Ministry of Health was received commenting on the Society's suggestions on the proposed new Infectious Diseases Regulations.

118. (Min. 68). Medical Examination of School Teachers.—Letters from the Ministry of Education following the comments of the Society on drafts of a circular, etc., proposed to be issued by that Ministry, were received. The comments had been forwarded to the School Health Service Group for consideration.

119. (*Min. 73*). **Registrar General—Changes of Address.**—In view of the decision that identity cards and the necessity to register changes of address should be dispensed with it was agreed that no further steps could be taken in this matter.

120. (*Min. 81*). **Sanitary Inspectors Working Party.**—It was reported that the Sub-committee which had been appointed to consider a draft memorandum of evidence for the Working Party prepared by Dr. John Maddison had been unable to agree on certain parts of the document and the Council had referred this question to this Committee for consideration. Certain amendments to the document were agreed and it was resolved that the second part of the document be re-written and considered further by the Sub-committee for submission to the next meeting of the Council.

121. (*Min. 87*). **School Health Service and General Practitioners.**—It was reported that provisional arrangements had been made for a meeting between representatives of the Society and the B.M.A. to discuss this matter and also the question of transmission of information from hospitals to M.O.H.s. It was resolved that Drs. Miriam Florentin, J. M. Gibson, and A. A. E. Newth be appointed the Society's representatives at the meeting.

122. (*Min. 92*). **Medical Manpower in Wartime.**—It was reported that invitations had now been received for the Society (a) to suggest a name for membership of the National Medical Manpower Committee and to make suggestions regarding the chairmanship of that Committee.

(b) to nominate a representative to serve on the Central Recruitment Committee for England and Wales.

(c) to make arrangements for the appointment of members and deputies to serve on the various Area Committees for Public Health Medical Officers.

At the request of Dr. J. M. Gibson it was resolved to recommend that the Council rescind the resolution contained in Minute 92 of the last meeting and that Dr. George Buchan or, if he was unable to serve, Dr. Wyndham Parker, be nominated for membership of the Central Recruitment Committee for England and Wales in the place of Dr. Gibson, and that Dr. Gibson's name be forwarded for consideration for membership of the National Medical Manpower Committee. With regard to (c) above letters had been forwarded to Branch Secretaries asking them to prepare the first list of nominations for agreement with the Local Authority Associations. It was resolved further that the Officers of the Society be appointed the representatives to discuss the matter with the Local Authority Associations.

123. (*Min. 94*). **Quality Milk Production.**—It was reported that a letter dated February 4th from the Ministry of Agriculture and Fisheries invited the Society to appoint representatives to attend a meeting on March 5th of the Working Party to give oral evidence in support and in amplification of the document already submitted. The meeting had been attended by Sir William Savage, Dr. T. Ruddock-West, Dr. E. Neil Reid and the Executive Secretary.

In this connection a letter dated March 6th from the Secretary of the Midland Branch was received, in which the Society was asked to press for the abolition of the existing presumptive standards as defined in the Sale of Milk Regulations, and the substitution of fixed standards for both fat and non-fatty solids in milk. The Executive Secretary stated that this had been urged by the Society's representatives to the Working Party.

124. (*Min. 96*). **Dentists Bill.**

(a) It was reported that a letter conveying the amendments suggested by the Society had been sent to the Lord President of the Council and copies to the Ministries of Health and Education and the Local Authority Associations.

(b) A letter dated February 9th from Sir William Savage requested that the Society should give consideration to pressing the Government to modify their proposals so that no charge would be made for conservative dentistry under the National Health Service if yearly attendances were made by the public following reasonably regular dental examination while the individual was at school. The suggestion was carefully considered and it was agreed that it could best be made by asking the Government to amend their proposals so that all persons under the age of 21 should be exempted from fees for dental work. It was resolved accordingly.

(c) It was resolved to ask the Dental Officers and School Health Service Groups to prepare memoranda on the future of the School Dental Service.

125. **Nominations of Public Health Service Representatives on the B.M.A. Council.**—It was resolved that Dr. J. M. Gibson and Dr. C. Metcalfe Brown be nominated as Public Health Service representatives on the Council of the B.M.A. and that if Dr. Metcalfe Brown was not able to serve, Dr. H. K. Cowan be nominated in his stead.

126. **School Ophthalmic Service.**—It was reported that at the request of the School Health Service Group a letter had been forwarded to the Chief M.O. Ministries of Health and Education stating that it was the Society's opinion that the first examination of a school child's eyes should always be carried out by an ophthalmologist and that refractions should only be performed by opticians after referral by an ophthalmologist and under their direction and supervision. In reply a letter had been received stating that it was the policy of both the Ministries that the school eye service should in general be included in the hospital eye service in which opticians all work under medical supervision. It was also pointed out that parents of school children could not be precluded from taking them for treatment under the supplementary ophthalmic service.

127. **Education Act, 1944.**—A letter dated February 21st from the Ministry of Education was received in which the Society was informed that the Government was considering the possibility of introducing a bill to make certain amendments to the Education Act. Details of the proposed amendments were forwarded and it was resolved that the matter be referred to the School Health Service Group for consideration.

128. **Foot Health Education Bureau.**—A request was received from the Foot Health Educational Bureau that the Society should officially give its support to a Foot Health Week which it was proposed to arrange from June 16th to 21st and which would be similar to that held during 1950. It was resolved that the Society should support this event.

129. **Private Slaughtering.**—A letter dated February 13th from Dr. F. A. Belam was received as follows:—

I am instructed by my Health Committee to ask for the co-operation of the Society of Medical Officers of Health in the following matter.

There is being built in Guildford a new abattoir. With reference to the slaughtering in this, the Chief Sanitary Inspector reported that Meat Inspectors had no authority to inspect the carcasses of pigs, reared by private people, which were killed for consumption by their owners? (ostensibly). Furthermore, if any of these carcasses were diseased the Inspectors have no authority to order the destruction of the diseased carcasses, but the Inspectors always recommended the owners of the carcasses to have them destroyed.

The Committee expressed concern at this state of affairs as they consider that all meat for human consumption should be inspected. The Committee have authorised the Town Clerk to make the strongest recommendations to the Ministry of Food and the Association of Municipal Corporations so that legislation may be introduced at an early date to provide for the compulsory inspection of all meat killed for human consumption.

I sincerely hope that the Society of Medical Officers of Health will also assist in this matter as it seems to me, as to the Committee, that it is of the greatest importance. It is quite obvious that no owner of a pig can eat it all himself and it would appear practically certain that portions would be sold, although proof of this would be very difficult.

The point is, however, that it has already happened in Guildford that a carcass of pig has been condemned for tuberculosis and the owner would not surrender it, meaning that he, or those with whom he shared it, would deliberately eat tubercular meat. The owner of course could not be stopped from this as, although the slaughtering took place at the public slaughterhouse, it was a private slaughtering of an animal which was supposed to be consumed by the owner and not sold for public consumption.

It was resolved to support the recommendations which had been made by the Guildford Corporation to the Ministry of Food and Association of Municipal Corporations so that legislation should be introduced at an early date to provide for an inspection of all meat killed for human consumption.

130. **Status of M.O.H.s.**—A letter dated February 25th from the Secretary of the Local Government Engineers and Surveyors called the attention of the Society to an advertisement which invited applicants for an appointment to the C.M.O.H. of Kirkcudbright C.C. The conditions of service issued in connection with this appointment included a clause which read "a M.O.H. who will be under the administrative control of the County Clerk." It was resolved that the matter be referred to the Scottish Branch for further investigation.

131. **Employment of Older Men and Women.**—It was reported that the Minister of Labour and National Service had appointed a Committee to advise and assist him in promoting the employment of older men and women. The President (Dr. W. G. Clark) kindly undertook to arrange for the preparation of a draft memorandum of evidence to be forwarded to the Committee on the Society's behalf.

132. **Local Authority Assisted Car Purchase Schemes.**—A letter from the Dental Officers Group suggested that the Society should endeavour to obtain exemption for these schemes from the proposed hire purchase regulations. It was pointed out that many Dental Officers and Assistant County Medical Officers in rural areas were required, under the terms of their appointments, to provide themselves with cars and were only able to do this under assisted purchase schemes. It was resolved that letters be addressed to the County Council Associations and the Association of Municipal Corporations asking them to give consideration to this matter and to make representations accordingly.

133. **Milk Supplies during Power Cuts.**—A letter was received from the Ministry of Health stating its reply to representations made by the Society that Local Electricity Authorities were prepared fully to co-operate to minimise difficulties experienced by the milk industry when power cuts affected the supplies to pasteurising and sterilising plants.

134. **Research into Poliomyelitis.**—Dr. Charles Cockburn of the Public Health Laboratory Service attended the meeting to give a brief résumé on the results of the investigations made in co-operation with M.O.H.s during 1951 and outlined the plans for a continuing enquiry during 1952. The enquiry had been directed under the following three headings:—

(a) the presence of virus in effluent from sewers in different parts of the country at various times of the year and during epidemic and inter-epidemic periods.

(b) to obtain information on the effect of prophylactic inoculation or tonsillectomy and its apparent association with cases of paralysis.

(c) to discover any principal illness or activity which seem to be connected with the contracting of the disease.

135. **Representation.**—An invitation was received from the N.A.P.T. for the Society to appoint a representative to attend the third Commonwealth and Empire Health and Tuberculosis Conference which is to be held in London from July 8th to 13th, 1952. Dr. H. D. Chalke kindly undertook to represent the Society on this occasion.

136. **Provincial Meeting of the Council.**—In view of the fact that the N.A.P.T. Conference clashes with the proposed date for the Provincial meeting of the Council in Edinburgh, it was resolved that this meeting be held on July 18th instead of the 11th as previously determined.

There being no other business the meeting was declared closed at 1.25 p.m.

APPENDIX B

Memorandum of Evidence presented to the Working Party on the Recruitment, Training and Qualifications of Sanitary Inspectors

The Society of Medical Officers of Health welcomes this opportunity of submitting observations on the recruitment, training and qualifications of sanitary inspectors, and hopes that the Working Party will find the memorandum helpful.

The Duties of Sanitary Inspectors

2. The Society has carefully considered the duties of inspectors, first in relation to the work of the health department as a whole, and then in relation to the recruitment, training and qualification of the inspectors.

In the Sanitary Officers (Outside London) Regulations, 1935, and the corresponding Order and Regulations for London, there is a list of the duties of sanitary inspectors consisting of 18 items, on certain of which we desire to comment as follows:

Article 27 (1). General Duties

3. This Article requires a sanitary inspector "to perform under the general direction of the medical officer of health all the duties imposed on a sanitary inspector by Statute and by any orders, regulations or directions from time to time made or given by the Minister or by any by-laws or instructions of the local authority applicable to his office."

4. A primary duty of the medical officer of health (Article 17 (1)) is "to inform himself as far as practicable respecting all matters affecting or likely to affect the public health in the district and be prepared to advise the local authority on any such matter." Under other Acts such as the National Health Service Act, the Education Act, the Food and Drugs Act, the Shops Act, the Factories Act, and perhaps various Local Acts, he is required to be responsible for the efficient performance of a great many public health functions, all of which have to do with safeguarding the health and lives of the people in his district. It has for long been an accepted practice for local authorities to appoint to the staff of the medical officer of health, assistants with varying

degrees of qualification and skill in the many techniques which form the work of a health department. Such assistants may be, in addition to doctors, nurses, inspectors, administrators, statisticians, clerical workers, psychologists, social workers, domestic workers, physiotherapists, speech therapists, and others. All these function as medical auxiliaries, helping the medical officer of health to discharge his many responsibilities. Each person is required to possess a certain standard of education and competence for the proper performance of his allotted duty; and although these duties vary very much in importance, each in his own way contributes his quota to the promotion of good health, the social welfare, and the alleviation of suffering among the population. The staff comprise a team of workers with a high ideal. The efficiency of this team depends on careful selection of the members, suitable education and training for each post, a realisation in each one of performance of a useful public service, and a loyalty to the team as a whole. One of its main functions is to provide the auxiliary eyes and ears to assist the medical officer of health to keep himself informed of the state of the public health in his district, and to inform him when conditions need attention or modification. The medical officer must keep the team united to form an efficient, co-operative group of workers; indeed, much of the success of his department depends on his ability to do this well.

5. Sanitary inspectors are essential members of this group of health workers. In the course of their duties all the workers in a health department to some extent become specialists in their own sections. Sanitary inspectors are concerned with the special field of environmental health. The field is a wide one; it includes the places where people live and work, the food and drink they consume, the air they breathe, the influence on their health of deleterious conditions in their neighbourhood, and certain aspects of infectious and other diseases. Often this field overlaps that of other members of the health department staff such as the health visitors, but this emphasises the singleness of purpose of the whole department in requiring co-operation in every aspect.

6. In working under the general direction of the medical officer of health the inspector is expected to pursue his avocation with diligence as a responsible officer. The medical officer does not need to exercise a detailed scrutiny of every duty performed, but he has to know generally what work is going on and when any special problem arises. He is at hand to help to solve the difficult problems which constantly occur and to determine where necessary their importance to the public health. In an emergency he can enlist the assistance of other members of the health department staff to help the inspectors. Especially in the relationships with general practitioners and hospital staff the medical officer can smooth the work of the inspectors a great deal.

Article 27 (5). Food Hygiene

7. Food hygiene is one of the oldest of public health problems and is very important. The item includes health education in food hygiene, and could well extend to nutritional science generally. The sanitary inspectors have a special responsibility for the investigation of outbreaks of food poisoning. As noted later in the section on the training of sanitary inspectors, we are of opinion that there should not be any necessity for a separate qualification in food hygiene.

8. **Division of Duties.** In some counties and the county districts included in them there is a division of the duties under the Food and Drugs Act between two sets of officers—for example, officers of the county dealing with the composition and adulteration of food and drugs, and inspectors of the districts dealing with food unfit for human consumption. A similar division sometimes exists in the supervision of milk pasteurisation plants. These and other anomalies arise as a result of the variations in the powers given to different types of authority under existing legislation. It seems desirable to avoid duplication of visits to premises by different types of officers for what are essentially health functions. We believe that the sanitary inspector is the officer who can best carry out the work.

Article 27 (8) and (9). Infectious Diseases

9. The medical officer of health has a statutory responsibility for the control of communicable diseases in his area, and the protection of its population against the risks of infection. The sanitary inspector is a valuable member of the team which assists him in this work. It is essential for the medical officer of health to know what communicable diseases are occurring in his area so that he can institute measures for mitigating or alleviating their consequences. Information is received mostly by formal notification but also partly by informal ascertainment in other ways. A great deal of supplementary information is

received from other sources such as health visitors, home nurses, sanitary inspectors and school teachers. The inspectors take their share in this work of informal notification together with other members of the staff of health departments. This again emphasises how important it is for all the staff in a health department to work together as a team.

In most authorities some part of the work of investigation and advice falls on the sanitary inspectors. In authorities which are not local health authorities this is sometimes so because they have no health visitors or district nurses. A few, however, do supply general and fever trained nurses for this particular duty. The districts are also charged with the responsibility for disinfection after the occurrence of cases of infectious disease.

We would add that any separation of the sanitary inspectors from the public health department directed by the medical officer of health would inevitably necessitate the appointment of new officers to the M.O.H.'s staff.

10. In some communicable diseases the initial work on epidemiological investigations, on giving of advice, and on the taking of specimens is best carried out by a trained nurse or health visitor. Thus sanitary inspectors may not solely be concerned in the control of infectious diseases, the wisest course being a division of duties between them and other members of the health department's staff according to the type of disease and the action required. This arrangement already obtains in county boroughs and is also possible in those districts where the medical officer of health is also the county area or divisional medical officer.

Article 27 (10). Public Cleansing

11. In small districts it is economically expedient to place the sanitary inspector in charge of the public cleansing department; where this is so the officer should possess evidence of the necessary knowledge comparable to, say, the certificate of the Institute of Public Cleansing. In larger authorities the work is usually carried out under the supervision of the borough surveyor or a separate public cleansing officer. The difference in practice between authorities illustrates the principle that when a certain course of action is necessary for health, and it has acquired an established and accepted technique, it is often possible and more economical to appoint an officer and a staff specially to deal with it, and thus to allow the health workers freedom to pursue their own more specialised duties. We regard the sanitary inspector as a specialised health worker and deprecate any tendency to regard him as an odd-job man who can be given the miscellaneous duties which do not fit easily into other departments of the authority.

Article 27 (11). Damage by Pests

12. Some authorities have appointed separate rodent officers who may or may not be sanitary inspectors. It seems best where practicable to leave the sanitary inspector to supervise the operations in his own district as part of his duty for the general control of infestations.

Article 27 (12 and 13). Housing

13. Section 5 of the Housing Act, 1936, requires a local authority to inspect its district to ascertain houses unfit for human habitation, and to comply with regulations. The regulations are contained in the Housing Consolidated Regulations, 1925, with the amendments of the Housing Consolidated Amendment Regulations, 1932. Article 28 of the 1925 Regulations (as amended) lays down 10 requirements in the light of which each house in the district has to be examined. All these inspections have long been accepted as the province of the sanitary inspector, and we agree with this.

14. *Building Licences.* In some authorities the issuing of building licences is carried out by officers of the borough surveyor's department. The main purpose of the licence system is to ensure a fair allocation of the amount of money which can be shared out. Difficulty can arise over questions of interpretation about the essentiality of work to be done. The officer issuing the licence may not have a full knowledge of the legal requirements; still less would a building contractor have knowledge of these when submitting his application for a licence on behalf of an owner. There is thus a case for the allocation of housing repair licences being in the hands of the district sanitary inspector or of a senior inspector. This would provide an additional safeguard against dishonest applications for materials. On the other hand, if a duty were laid on the borough surveyor (or the officer responsible for the issuing of licences in his department) to ensure that the legal standards required to render a house fit were complied with, the officer would soon become familiar with the requirements.

15. *Applications for Council Houses.* The assessment of priority for houses on medical or health grounds requires careful

attention by the medical officer of health. The sanitary inspector is one of the principal field officers for the collection of information on environmental factors which the M.O.H. must take into account, together with clinical information about the persons concerned, when making his recommendations. The routine taking of particulars and making of enquiries should not necessarily devolve upon the sanitary inspector.

Article 27 (15). Inspection of Shops

16. In addition to the primary health matters some authorities employ sanitary inspectors on those duties under the Shops Acts which deal with hours of closing and conditions of employment; other authorities employ a separate inspector. The latter arrangement may be the best in the light of existing legislation, but as long-term policy we consider that all matters which affect the health and comfort of the shop worker should come directly within the province of the health department.

Miscellaneous Duties

17. A number of miscellaneous duties which have little to do with public health have sometimes been given to inspectors. Examples are the licensing of premises which store petroleum, licensing of hackney carriages, and the arranging for the burial of persons dying without relatives. We condemn the practice of placing such duties upon sanitary inspectors.

Inspection of Factories

18. We think that local authorities should carry out industrial health functions. We would welcome, therefore, an extension of the present powers so as to enable sanitary inspectors to undertake those duties at present exercised by H.M. Inspector of Factories on such matters as safety precautions, guarding of machinery, special hazards from chemical and industrial processes, and other matters of a welfare nature.

Specialist Inspector and All-Purpose Inspector

19. Authorities differ in the amount of specialisation required, mainly according to their size. In large towns, especially where there is some over-riding problem, there is a tendency to make certain limited duties the responsibility of perhaps one or two inspectors, who thus become particularly expert in those duties, e.g., meat inspection, especially in abattoirs, food premises, smoke abatement, slum clearance, pasteurisation plants and so on. In smaller towns and districts, a common practice is to give each inspector an area to look after in which he carries out all his functions. Some authorities combine the two methods. It can be argued that the more specialised the task, the more proficient the person doing it becomes, but against that must be weighed the effect of monotony in a task which has little variation. Even with the specialised tasks there is generally something fresh happening every day, new problems are constantly being posed, and an inspector may well find a great deal of work of absorbing interest. On the other hand, some advantages of the area system are that the inspector gets to know his district and the people well, and they to know him; they turn to him for advice on many health problems; he becomes more experienced in the technique of health education and is better fitted to fill the role of a friend and adviser.

It is difficult to generalise on this matter; it may well be that the use of both types of inspector side by side in the same department is the best in some particular locality. We would emphasise that whatever arrangement is used, the training of the inspector should fit him for any duty he may be called upon to perform.

The Chief Sanitary Inspector

20. It seems right to hold the senior or chief sanitary inspector responsible for the more detailed supervision of the work of the other sanitary inspectors, but as already explained, all the chief sanitary inspector's work should be under the general direction of the medical officer of health.

The Qualifications of Sanitary Inspectors

21. The statutory position is as under:
Local Government Act, 1933. Section 108. The Minister may by regulations prescribe the mode of appointment and tenure of office of sanitary inspectors of boroughs and urban and rural districts and the qualifications and duties of sanitary inspectors. Compliance with the regulations shall not be obligatory on borough, urban and rural district councils, but compliance therewith shall be a condition of the right of the council of any county district to receive from the county council any payment.

(Continued on page 160.)



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Clinical trials are being continued.

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22. The regulations have prescribed three qualifying certificates, the present one for newly qualified inspectors being a certificate of the Royal Sanitary Institute and Sanitary Inspectors Examination Joint Board. Except in the case of any county borough which before it was a county borough received part payment of the salaries of its inspectors from the county council, the qualifications are not obligatory on county boroughs. They are obligatory in metropolitan boroughs and in county districts which receive the part payment from the county council. Thus county boroughs are exempted from the requirement to have properly qualified inspectors. It seems desirable to require a proper qualification for every inspector without regard to whether or not his authority receives part payment of his salary.

Training

Qualifying Regulations

23. The present regulations for candidates wishing to become sanitary inspectors require:—

- (a) Preliminary education up to at least school certificate or general certificate of education standard, a recognised or equivalent standard, as prescribed by a fairly comprehensive list of examining bodies.
- (b) Preliminary training (after January 1st, 1953) consisting of compulsory attendance for the first and second years of a senior course for the National Certificate or Diploma in Building, or a special course in sanitary science.
- (c) Attendance, generally part-time, spread over two years at an approved institution, for a course of lectures and demonstrations on the work of a sanitary inspector.
- (d) Practical training in the work of a sanitary inspector for the equivalent of one year; or else three years in approved building crafts, plus the equivalent of six months in a health department.

The Status of Sanitary Inspector

24. It is a matter of some difficulty to determine the appropriate level of intelligence, general knowledge, and technical training required to carry out efficiently the duties of a sanitary inspector. We have seen earlier that much of the work is concerned with the inspection of houses, dairies, shops, food premises, slaughterhouses, factories, workplaces, vessels, offensive trades and nuisances and with the need to secure good hygienic conditions wherever they are found below standard. In these matters an inspector must have sufficient intelligence, education and technical training to enable him to understand the application of the principles of health in all these varied environmental settings. But there is need also for the inspector to have some knowledge of the wider field of health education, which would include education and often technical instruction of the public. In the course of their duties sanitary inspectors have to meet such people as factory managers, architects, estate agents, shopkeepers and others, and they should be able to hold their own in technical discussions. Their duties include the giving of lectures to the public, to specialised groups such as food handlers, to children in schools, to factory workers, and in general, to give health education wherever it is needed. They should have the ability to give technical advice wherever the need for promoting the health and welfare of the community exists.

The functions of inspectors are changing; more and more they will need to be proficient in environmental hygiene in its widest sense, and should be closely linked with the general community health services, especially in the field of health education.

25. The type of man needed then is one with intelligence, a steady reliable personality, with good general education, and with a sound technical knowledge of the principles of hygiene. However, it is neither necessary nor desirable to aim too high. The level of ability we have in mind is that which would be attained by a boy able to satisfy the present training requirements in preliminary education, that is to have attained school certificate standard or the general certificate of education at ordinary level. If the selection of candidates is based on a demand for anything substantially higher than this we think that that would be a mistake.

Recruitment and Period of Training

26. The present system of training is really one of apprenticeship. The most frequent method of recruitment is to take boys into the health department as junior clerks after they have passed their ordinary examination or equivalent, at age 16 or 17. If they wish to train as inspectors, facilities are given to them to see the work of the inspectors and to obtain practical instruction. Under the new rules commencing in January, 1953, the period to acquire the basic sanitary inspector's status will be four years; if a man proceeds to take the Meat and Other

Foods Certificate, additional time is involved. The first two years of the basic course will be spent on the building course and the next two on the sanitary inspector's course. The classes are taken at an evening school on three nights a week, fairly continuously except for short breaks at holiday periods.

27. It might at first sight be asked whether it is reasonable to require an apprenticeship of as long as four years. Few boys will be less than 16 before they can attain the general certificate standard and most will be nearer 17. It may be possible for a boy to put in one year either in a public health department or in a building craft, after which will come his Army service. By the time he has finished this he will be about 20. He then has to spend another year in the building craft, then take his inspector's training proper which will occupy another two years, by which time he will be about 23.

Thus on reaching that age the newly qualified sanitary inspector will have reached the minimum of Grade APT. 1. When this is compared with the prospects of a youth from the ranks of the clerical workers in local government reaching the same grade in the administrative class, the status of the sanitary inspector compares favourably. Therefore, we would say that, considering the training is part-time and carried out whilst the student is earning, the training period is reasonable.

The Training Course

28. The training course should be sufficient to give the student inspector the amount of general knowledge, theoretical and practical training necessary to fit him for the post; the whole course should be adjusted to the level of the ability of the candidates.

29. The main defects of the present course are the lack of essential knowledge of the basic sciences on which environmental health is built; lack of knowledge of the technique of education for health purposes; often insufficient instruction on the functions of other members of the health team; limited experience, because apprenticeship is often confined to one type of authority, and leads to the necessity to take extra certificates after the basic qualification.

30. Although we realise the advantage to the inspector of taking the certificate and of obtaining a post with a local authority after completing the inspector's course, and then proceeding with the meat and other foods course whilst he is earning a higher salary, we would support the idea of a training course planned as one complete in itself, instead of as at present, being divided into three stages—the building course, the inspector's course, and the additional meat and other foods course.

31. We have considered whether or not to recommend, in substitution for the present part-time training course, a full-time course at a technical college or similar institution. We feel that there is room for further experimentation in full-time training, but that, until there is evidence to the contrary, the system of employing student trainees in a public health department seems undoubtedly the best.

32. Training might be restricted to approved local authorities which are considered to be able to arrange for a balanced and comprehensive programme.

33. We consider that, with the passage of time, the title "Sanitary Inspector" no longer represents the scope and responsibility of this officer's work. We would support a change of title, such as "Hygiene Inspector."

34. A separate note about the position of port health inspectors is given as an Appendix.

35. Summary

(1) We believe that the promotion of health depends on team work under the direction of the medical officer of health. The sanitary inspector is an important member of that team, and has as his special province environmental hygiene.

(2) The regulations prescribing the qualification of sanitary inspectors might be amended to include all inspectors.

(3) We believe the present system of part-time training combined with pupillage in a health department best serves the needs of local authorities.

(4) We have itemised ways in which the present course is unsatisfactory.

APPENDIX

Port Health Inspectors

In view of the specialised nature of the duties carried out by port health inspectors, recruitment to this branch is to some extent a separate problem. The ordinary training for the sanitary inspector's certificate cannot be expected to supply the specialised knowledge of maritime matters for the small number of men who are needed for purely port health duties. For this class

experience in the Merchant Navy or shipbuilding is required, in addition to the sanitary inspector's training; and it is further suggested that some special knowledge of chemicals and gases encountered in ships is required.

We would repeat here a similar opinion to that expressed in the last paragraph of 9 in our main memorandum, i.e., the port health inspector *must* work from the same department as and under the direction of the port medical officer if the control of infectious disease is to be effectively and economically exercised.

APPENDIX C

Decentralisation of National Health Service Part III Functions

1. The Society of Medical Officers of Health is concerned with the effects on promotion in and future recruitment to the Public Health Service of the changes in the allocation of public health functions brought about by the operation of the National Health Service Act of 1946. One of the main changes was that which transferred responsibility for personal health services concerned with expectant and nursing mothers and children under five from some 300 borough and district councils to the administrative counties in which "minor" authorities were situated. A similar transfer had previously occurred in respect of school health services under the Education Act, 1944, but that Act made specific provision for decentralisation to Divisional Executives. Moreover, this Act gave local authorities with populations of not less than 60,000 and school populations of not less than 7,000 the right to be "excepted," on application, from schemes of divisional administration; 47 "minor" authorities thus became "excepted districts."

2. Under the National Health Service Act, the Minister did not use the powers given to him by S.22(4) to decentralise child welfare services but in Circular 118/47 recommended that county councils, except those of small size or where there were special circumstances ruling against this step, should decentralise services for mothers and children under five by subdividing the county area and appointing sub-committees of the statutory health committee, on which district councils would be represented;

and by leaving to those sub-committees the day-to-day administration not only of child welfare but of other National Health Service Part III services also. Continuity was the main reason advanced by the Ministry for this recommendation but it is also felt to be in the best interest of the medical officers generally to encourage local interest in the services concerned.

3. More recently, the Local Government Manpower Committee has published the recommendations of its Delegation Sub-committee which have been endorsed by the then Minister of Local Government and Planning, and which included recommendations similar to those of Ministry of Health Circular 118/47.

4. The Society of Medical Officers of Health is in favour of decentralisation of National Health Service, Part III, functions by county councils wherever practicable. The Society considers that such decentralisation should be to sub-committees of county health committees (as authorised by the Fourth Schedule, Part III, paragraphs 6 and 7) which should be responsible for day-to-day administration of some or all of the Part III services. The medical officer appointed to serve the sub-committee normally has other duties to perform and may be medical officer of health for one or more of the county districts in the area. So far as the medical officer's duties under Part III of the National Health Service are concerned, he should act as a senior member of the staff of the county medical officer. Policy, finance and establishment are retained as functions of the central committee.

NORTHERN BRANCH

President: Dr. J. V. Walker (M.O.H., Darlington C.B.).

Hon. Secretary: Dr. W. S. Walton, O.M. (M.O.H., Newcastle-on-Tyne C.B.).

A meeting of the Branch was held at Elswick Grange, Newcastle-on-Tyne, 4, on Friday, March 28th, 1952, at 4.30 p.m. The President was in the chair and 20 members attended.

Medical Manpower Committee.—Minute of February 15th, 1952.—A Report by the Hon. Secretary on nominations from the Branch to the Medical Manpower Committee was circulated to members present. The suggestions contained therein were agreed.

(Continued on page 162.)



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The meeting did not suggest any preference as to which nominations would be members and which standing deputies.

Letters to "Public Health."—The President stated that the Council of the Branch had not yet considered the matter raised by Dr. Shanley at the last meeting and it was agreed that it stand over until the next meeting.

Local Health Authorities and Regional Hospital Boards.—**Staffs.**—The President submitted a letter from Dr. J. B. Tilley on a scheme for the integration of Local Health Authority and Regional Hospital Board clinical staffs. After Dr. Tilley had expressed his opinion on the value of the suggested scheme, it was agreed that the matter be referred to the Council of the Branch for consideration.

Dysentery Survey and Law re Illegitimate Children.—The President submitted a letter from Dr. E. C. Downer (Middlesbrough) enclosing a copy of a communication which he had addressed to the Executive Secretary on two matters: first, the setting up by the Medical Research Council of a Committee to investigate the cause of spread of, and to lay down lines of control of, outbreaks of dysentery; and secondly, the alteration of the law in relation to illegitimate children.

It was agreed that this be considered at the next Branch meeting.

Address by Mr. C. J. L. Thurgar.—After an introduction by the President, Mr. C. J. L. Thurgar addressed the members on "Cancer, Prevention, Publicity and Treatment Facilities." His discourse, during which he mentioned the possibility of a pilot survey into the incidence of Cancer on Tyneside, caused considerable discussion on many aspects of the problem of cancer. A vote of thanks moved by Dr. Tilley was carried with acclamation.

WELSH BRANCH

President: Dr. W. P. Phillips (Dep. M.O.H., Cardiff).

Hon. Secretary: Dr. R. T. Bevan (Dep. M.O.H., Glamorgan).

A meeting of the Branch was held at B.M.A. House, Cardiff, on February 22nd.

There were 19 members present, and in addition there were about 40 visitors.

The President then introduced Prof. Heaf, who addressed the meeting on "A Tour of West Africa." The lecture was illustrated by lantern slides, the results of photographs taken by Prof. Heaf.

Following a brief historical account of the development of the Colonies, Prof. Heaf showed how the inhabitants lived, their housing conditions, their system of education, their medical services, the effects of religion, and the various ways in which they earned their living.

A feature of the lecture was the remarkable series of beautiful pictures of the country. Some of the colour photographs were of exceptional beauty and many of the audience were particularly impressed by the photographs of the local flora.

Dr. Gilchrist proposed and Prof. Grundy seconded a vote of thanks to the speaker.

OFFICIAL NOTICES

CITY OF NORWICH

APPLICATIONS for the posts of ASSISTANT SCHOOL DENTAL OFFICERS are invited from registered dental surgeons, male or female. Salary scale £800 per annum rising by annual increments of £50 to £1,250 per annum. Particulars can be obtained from the Medical Officer of Health, 68, St. Giles' Street, Norwich.

UNIVERSITY OF LONDON

A. H. BYGOTT AND ELLISTON SCHOLARSHIPS
1952

Application is invited from registered Medical Practitioners (preferably those who are serving in Public Health Departments or who hold short-term Service Commissions in H.M. Forces or who expect to enter the Public Health field) for (A) the A. H. BYGOTT SCHOLARSHIP, of the value of £200, and (B) two ELLISTON SCHOLARSHIPS, each of the value of £150.

All of the above Scholarships are tenable at the London School of Hygiene and Tropical Medicine, for one year, for the course for the Academic Post-graduate Diploma in Public Health commencing on September 29th, 1952; and in each case remission of fees will be granted to the holder of the Scholarship.

Application must be made by June 15th, 1952; application forms and further particulars may be obtained as follows: for the Bygott Scholarship from the Academic Registrar, University of London, Senate House, London, W.C.1; for Elliston Scholarships from the Dean of the London School of Hygiene and Tropical Medicine, Keppel Street, London, W.C.1.

Applicants may apply for both Bygott and Elliston Scholarships.

COVENTRY LOCAL EDUCATION AUTHORITY

ASSISTANT SCHOOL MEDICAL OFFICER AND ASSISTANT
MEDICAL OFFICER OF HEALTH (MALE)

Applications are invited for the above post from registered medical practitioners, preferably under 40 years of age. The possession of a Diploma in Public Health will be an advantage. The duties are mainly in connection with the medical inspection and clinic treatment of school children, and such other duties as the School Medical Officer may from time to time direct.

The salary payable will be £850, rising by annual increments of £50 to a maximum of £1,150 per annum. In deciding the commencing salary, account will be taken of previous experience and qualifications.

The post is superannuable, the successful candidate will be required to pass a medical examination and to contribute to the Coventry Municipal Officers' Widows' and Orphans' Pensions Fund.

Further particulars may be obtained on request from the undersigned, to whom applications (no forms provided) should be returned within 14 days of the appearance of this advertisement.

The Council House,
Coventry.

T. MORRISON CLAYTON,
School Medical Officer.

May 6th, 1952.

COUNTY OF MONTGOMERY

MIXED APPOINTMENTS

The County Council, and the County District Councils of the County of Montgomery, invite applications from duly qualified and registered medical practitioners who possess a diploma in public health, sanitary science or State medicine, for the following whole-time mixed appointments:—

(1) One medical officer, to act as an Assistant County Medical Officer of Health, and as Medical Officer of Health, respectively, to the following districts:—

The Borough of Llanfyllin; the Borough of Montgomery; the Borough of Welshpool; the Foden Rural District; and the Llanfyllin Rural District.

(2) One medical officer, to act as an Assistant County Medical Officer of Health, and as Medical Officer of Health, respectively, to the following districts:—

The Borough of Llanidloes; the Newtown and Llanfyllan Urban District; the Machynlleth Urban District; the Machynlleth Rural District; and the Newtown and Llanidloes Rural District.

As Medical Officer of Health, the officer will be responsible to each District Council in his combined area. As Assistant County Medical Officer of Health, he will act under the general control and supervision of the County Medical Officer. His duties will be those prescribed by statute or regulation, and will be such as are usually attached to such appointments, respectively. He should have had experience of School Health Services (including the examination of handicapped children), and of Child Welfare Services, and a diploma in child health is desirable.

The commencing salary will be £1,300 6s. per annum, rising by four annual increments of £56 6s., followed by two annual increments of £31 6s. to a maximum of £1,593 15s. per annum. A motor-car allowance will be paid in accordance with the scales recommended by the National Joint Council for Local Authorities' A.P.T. and C. Services.

The appointments are subject to superannuation (and the selected candidates will have to pass a medical examination), and are subject to the provisions of Section 110 of the Local Government Act, 1933, and the Sanitary Officers (Outside London) Regulations, 1935, as amended by the Sanitary Officers (Outside London) Regulations, 1951.

Forms of application may be obtained from my office, and applications, accompanied by two recent testimonials, and the names of two other persons to whom reference can be made, must reach me not later than June 16th, 1952.

County Offices,
Welshpool.

P. B. WHITE,
Clerk of the County Council.

April 26th, 1952.

Public Health is the Official Organ of the Society of Medical Officers of Health and a suitable medium for the advertisement of official appointments vacant in the health service. Space is also available for a certain number of approved commercial advertisements. Application should be made to the Executive Secretary of the Society, at Tavistock House South, Tavistock Square, W.C.1.

Subscription 31s. 6d. per annum, post free, in advance.

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Tavistock House South, London, W.C.1**

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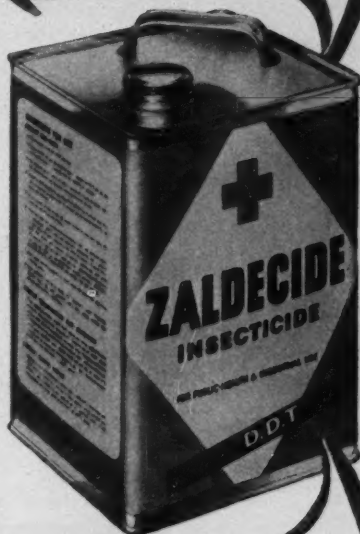
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Printed by H. R. Grubb, Ltd., Croydon, and Published by The Society of Medical Officers of Health,
Tavistock House South, Tavistock Square, W.C.1.